DOCUMENT RESUME

ED 346 891 JC 920 206

AUTHOR	Agosto, David; And Others
TITLE	Student Persistence Rates.
INSTITUTION	Los Angeles City Coll., Calif.
PUB DATE	92
NOTE	118p.
PUB TYPE	Reports - Research/Technical (143) -- Statistical Data (110)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	*Academic Persistence; College Credits; Community Colleges; *Educational Attainment; *Enrollment; Enrollment Trends; Ethnicity; Graphs; *School Holding Power; *Student Attrition; *Student Characteristics; Tables (Data); Two Year Colleges
IDENTIFIERS	Los Angeles City College CA

ABSTRACT

In 1992, a study was undertaken to measure student persistence at Los Angeles City College (LACC) over a 3-year period. A total of 462 new, entering students were selected from a larger, random sample of 1,250 full- and part-time students who had enrolled in credit courses in spring 1989. Descriptive items, such as student characteristics and enrollment trends, were analyzed. Highlighted findings included the following: (1) no students had achieved a certificate of completion or degree within the 3-year span from spring 1989 through the end of fall 1991; (2) two females had completed an Associate in Arts in liberal arts by February 1992; (3) the mean number of females completing units was 26.78, while the mean number of males was 18.78; (4) there was no significant correlation between ethnicity and rate of attrition; (5) almost half of those initially enrolled (n=205) had registered, but failed to appear in the first semester of enrollment; (6) almost all students had received no matriculation services beyond admissions and orientation; (7) probation figures did not reflect the actual large number of students enrolling each semester who completed zero units of credit; and (8) 29 of the original 462 students were still enrolled in spring 1992. Appendixes include a key to the study's code book variables; bar graphs presenting data on citizenship status, and units completed by department; an LACC application for admission; a summary of study findings and recommendations; and study data aggregated by student characteristics, such as major by age group, ethnicity, day/evening status, probation status, cumulative units completed, enrollment by semester by units completed, and semester units completed by gender. (JMC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED346891

STUDENT PERSISTENCE RATES

Committee: David Agosto, Bob Kort, Molly Squire

Los Angeles City College
855 N. Vermont Avenue
Los Angeles, California 90029
(213) 669-4000

JC 920 206

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M. A. Squire

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

Committee: David Agosto, Bob Kort, Molly Squire

This project was conceptualized by President Jose Robledo. We have received such positive support from so many people anxious to have this project succeed that we have to acknowledge them:

From the District Office we received full cooperation and information available to Dr. May Chen, Director, Office of Research and Planning, Educational Services Division and Tom; Vincent Sanchez, Systems and Program Manager; Dexter, Data Processing; George Prather, Ph. D., Research Analyst; Neal Achedah; Rebecca Tilberg; Bob Ponick, Ph. D., Research Analyst; Paul H. Dillon, Ph. D., Research Analyst; Millie Tani, Operations.

From the Los Angeles City College campus thanks are due for graphics assistance by Tina Donofrio; workspace and tapes graciously mounted by Happiness Orise; original labelling files for variables from Dr. Robert Mason's account obtained and compiled by Mark Mathias, M.A.; understanding of admissions information and procedures from Silvia Ortiz, Admissions Supervisor.

Thank you also to Linda Umbdenstock; Julie Slark at the Rancho Santiago College Research Department; Diane Hirshberg, ERIC Clearinghouse at UCLA; Bob Barr, Ph. D., Director of Institutional Research and Planning, Palomar Community College; and Nathan Brandt of the U. S. Department of Education, Statistical Research Division.

© 1992

TABLE OF CONTENTS

ABSTRACT		5
I.	PERSISTENCE	6
II.	METHODOLOGY	6
	POPULATION	7
	SAMPLE	8
	DATA SOURCE	9
	VARIABLES	9
	PERSISTENCE RATES	10
	VALIDITY	11
	MEASURES	12
	AGGREGATE VERSUS INDIVIDUAL MEASURES	13
III.	DESCRIPTIVE DATA	14
	DISABLED STUDENTS	14
	GENDER	14
	ETHNIC DIFFERENCES	15
	CENSUS	15
	USE OF VARIOUS FINANCIAL ASSISTANCE PROGRAMS	15
	PROBATION	16
	AGE	17
	GOAL	17
	TRANSFER	18
	PLAN	19
IV.	PERSISTENCE MEASURES	19
	THOSE WHO DROPPED THE FIRST SEMESTER	19
	COMPLETION RATE	20
	UNITS ATTEMPTED	21
	UNITS COMPLETED	22
	CUMULATIVE UNITS COMPLETED	24
	UNITS COMPLETED BY GENDER	25
	UNITS COMPLETED BY ETHNICITY	25
	MAJOR	26
	MATRICULATION SERVICES	28
	SPRING, 1992	
V.	CONCLUSION	31
	RESULTS COMPARED WITH OTHER STUDIES	31
	CONCLUSION	33
	COSTS	35
	SUGGESTIONS	35
	TEMPLATE	38
VI.	REFERENCES	39
APPENDIX A	MEDS VARIABLES	41
APPENDIX B	SPRING, 1992, ENROLLERS	42
APPENDIX C	CITIZENSHIP OF SAMPLE	43
APPENDIX D	UNITS COMPLETED IN SOME DEPTS.	44

APPENDIX E APPLICATION FOR ADMISSION 45
APPENDIX F MAJOR BY AGE GROUP/NUMBER/STUDENTS 46

VII. TABLES
TABLE 1 7-A
TABLE 2 12-A
TABLE 3 13-A
TABLE 4 14-A
TABLE 5 15-A
TABLE 6 16-A
TABLE 7 17-A
TABLE 8 21-A
TABLE 9 21-B
TABLE 10 22-A
TABLE 11 25-A
TABLE 12 26-A
TABLE 13 27-A&B
TABLE 14 27-C&D
TABLE 15 29&29-A

ABSTRACT

A measure of student persistence rates showed no students achieving a certificate of completion or degree within the three year span from Spring, 1989, through the end of Fall, 1991. There were two females who completed an Associate in Arts, Liberal Arts, by February, 1992. Females completed significantly more units than the males in the study ($P < .01$). There was no significant correlation of ethnicity and rate of attrition. Almost half of those initially enrolled (205 of 462 sample group) registered but failed to appear in the first semester of enrollment. 169 of the total sample of 462 earned any credit at all. Almost all students received no matriculation service beyond admissions and orientation. The probation figures did not reflect the actual large number of students enrolling each semester but completing zero units of credit each semester. 29 of the original 462 students were still enrolled in Spring, 1992.

PERSISTENCE

Do Los Angeles City College (LACC) students achieve the goals with which they enter?

Do they go on to enroll in four year colleges?

Initially, President Robledo asked for a report on how many students completed an associate degree or a certificate within a specific time frame. We broadened this to include a look at how many students persist over time - steadily completing units even though they have not yet been awarded a certificate or degree. We evaluated the traditional definitions of persistence rates at the community college level.

Our goal was to measure the persistence rate, over three years, of the students who enroll at Los Angeles City College (LACC). We examined the sample group of students' original educational status upon entering LACC and compared them with their final status after three years as measured by current data and limited telephone contact of the sample group.

Because this is an internal report, for self-knowledge, we focused chiefly on our own campus figures, and did not emphasize comparisons with other campuses' completion rates within the district, though we do discuss findings at other schools and include ideas that they are innovating.

METHODOLOGY

This is a descriptive study. It is intended as an overview done within a limited time span. As such, it achieves the purpose on which we focused, to count persistence, and suggests a number of

areas for further investigation.

This is not a true experimental design. We focused on our own campus and mainly sought information on completion rates as they are naturally occurring. There is no treatment of any students and the only comparisons are comparing our findings to limited data made available to us from other campuses.

POPULATION

Description of Los Angeles City College Student Body

The percent of the student body male and female has remained stable, within 2% over the past 19 years (7). The percent of Asian has remained fairly stable since 1989, the year of our sample population's enrollment and the percentage of Black, Hispanic, and Caucasian have all remained fairly stable. See Table 1.

The population entering Spring, 1989, was the group of entering students from which we selected our random sample. Associate degrees are generally a minimum of 60 units, while a full time LACC student will generally take 12 units per semester to qualify for student loans, as this is the minimum number of units for which credit is given for full time study. Therefore, after two and one-half years at that rate, or from Spring, 1989 to Fall, 1991, our last available final data, would be three years.

Specific criteria for our sample was established. The sample was taken from those enrolling for credit and enrolling for the first time in Spring, 1989. We did not restrict ourselves to just full time, nor did we restrict ourselves only to day or evening students. We wanted a good selection from all those enrolling for

Ethnic Makeup of sample

-of- sample 462 Students

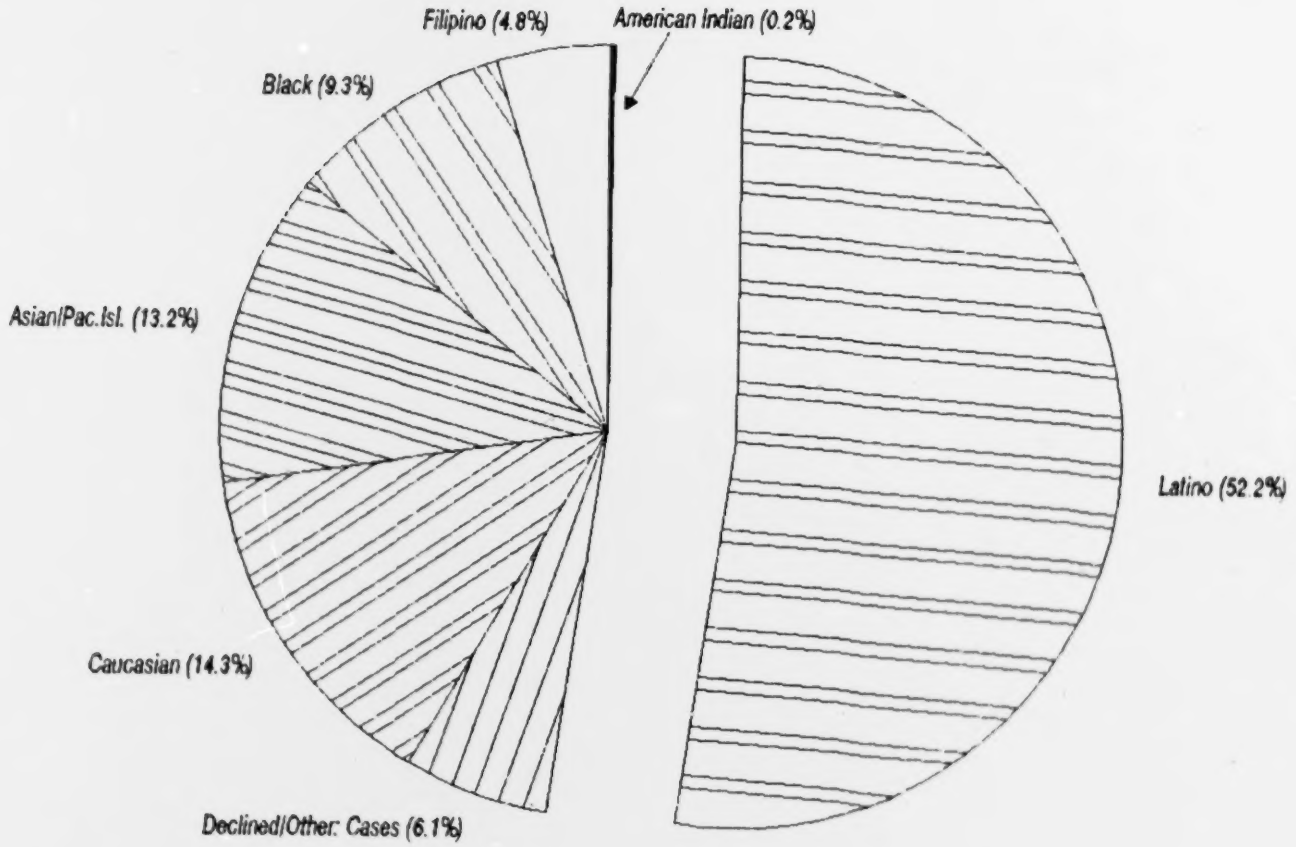


Table 1

credit.

SAMPLE

Using one source we anticipated a student retention rate over a semester of about 75% (1). Projecting this rate out over the length of a program, we selected a sample of at least 375 students for contact, anticipating a 75% completion rate or 300. This size sample was selected by Bob Kort as a manageable size sample with which to work in the time frame we are allotted, and small enough that we might contact all who persisted. It serves as a pilot study, a guide to indicate areas of further research, and an initial, cursory examination of the rate of student attrition and the persisters' stories which we seek to document. In future studies, researchers may want to run these measures on all an entering cohort group, eliminating the need to verify the acceptability of a sample.

We used the SPSS-X random sample procedure selecting 1250 identification numbers from those enrolled during the Spring of 1989. From this random sample, we selected all the students whose status was "new, entering student." This is how we arrived at our sample of 462. When we saw the sample size, showing about one third of those enrolled were new entering students, we were satisfied that it was close enough to our original plans to measure about 300 students.

We compared the student body ethnic ratios to the demographics of the sample that we used for this study. The sample was representative of the population.

DATA SOURCE

To save time and make the fullest use of archival data, thus keeping our expenses down, we accessed the Los Angeles Community College District's MEDS (matriculation evaluation data system) databank. This information was used to run initial population profile examination of the Spring, 1989 cohort group. The MEDS data contains material listed in Appendix A.

The data is in four layouts, or sections. Each semester has data in four files, labelled layouts one through four. We looked at nine semesters - spring, summer, and fall for each of 1989, 1990, 1991, respectively.

This was intended to eliminate all students returning to Los Angeles City College after an absence of a semester or more and those continuing students on continuous enrollment. After a recheck, at least one student had actually enrolled in 1987, completed no units for credit and then reenrolled in 1989 claiming no prior enrollment. Because this was part of a spot check we have no way of knowing how many other students were actually reenrolling.

We were aware of the possibility of approaching different programs and departments for more complete information than was in the archival records, but due to time and budget constraints we limited the scope of our measures.

VARIABLES

We wanted to look at the variables in the MEDS databank. There were a total of 205 variables per student after we combined

the files over nine semesters. We then combined some of this information and recoded it for certain measures making a few more variables. Of the variables listed, we learned that most would be unmeasurable because there was no system in place yet to collect the data. The items were actually place holders against the day the data would be gathered as part of a regular process. The District office is designing such a system.

What we were able to assess was enough for the basic answers to our study, but not enough to suggest any answers to "why" the drop out rate is so high or the degrees completed rate is so low.

Items included in this analysis were

DESCRIPTIVE INFORMATION on the sample data, age, whether or not they are U. S. citizens, gender, ethnic background, goals upon entering, whether they are day, evening, or combining attendance in both day and evening, majors declared upon entering, number of enrollers per department,

AND

TRENDS of how many units enrollers in each department tend to take, across the nine semester period, trends of reenrollment by ethnic group, and trends of reenrollment by major departments.

PERSISTENCE RATES

Traditionally, the community college has been said to be a two year college. However, our students qualify for full time enrollment and scholarship or loan funds with 12 units per semester. This means full time students would need at least two and one half years to comfortably complete the program if they

didn't do any summer course work. We did not limit this study to those enrolled full time. We included part time enrollment also. The part timers working toward a degree or transferability would need an even longer time to complete the requirements.

Certificates of completion, degrees, and number of units accumulated to transfer are all measures of persistence rate. We measured degree completion or certificate completion from the MEDS data bank and major of degree, layout 4, for each of nine semesters where

1=Associate in Arts

2=Associate of Science

3=Certificate of Completion

Persistence by transfer rate is not recorded in the MEDS data bank. The MEDS file does not list successful transfer rates, or even whether transcripts were sent to a four year college or not at the student's request. We opted for the definition "transferable" as meaning the school had provided the individual with at least 60 units and they should be able to transfer to a four year college presuming their units completed a course of study. We also include a study of actual reported LACC transfer students later in this report.

VALIDITY

We drew a random sample from the LACC students entering in Spring, 1989. We did not knowingly include the use of self report instruments, but the measure of "cumulative units completed" was influenced by self report (see Units Completed section). We

limited our measures to archival data.

MEASURES

We wanted to measure the graduation correlation of historically underrepresented groups as defined by Subchapter 1 of Chapter 4 of the Division VI of Title 5 of the California Code of Regulations: ethnic minorities, women, and disabled. As we had no disabled in the sample and the only two recorded graduates were in February, 1992, both female, we could not reasonably compare graduation rates of these subgroups.

Other community colleges have measured persistence compared by ethnic group. This seems an exceptionally divisive and indefensible practice. The purpose of pinpointing who will persist and who will not is not served by comparing ethnic groups without controlling for other demographic variables such as poverty, use of government assistance, and being the working head of a household.

Especially in the light of the recent riots and sore feelings on all sides of the fence over affirmative action, we focused on units completed from views other than ethnicity, though the count is included in a graph (see Table 2).

We looked at those who persist through departments by comparing those who repeatedly enroll without completing any units of credit, dropouts who cause classes to fill up but whose drop out rate adds to the cost of educating the remaining students in classes smaller than originally scheduled. We looked at those who enroll and complete credit by one or three units at a time, a measure of those taking one class or less but still reenrolling.

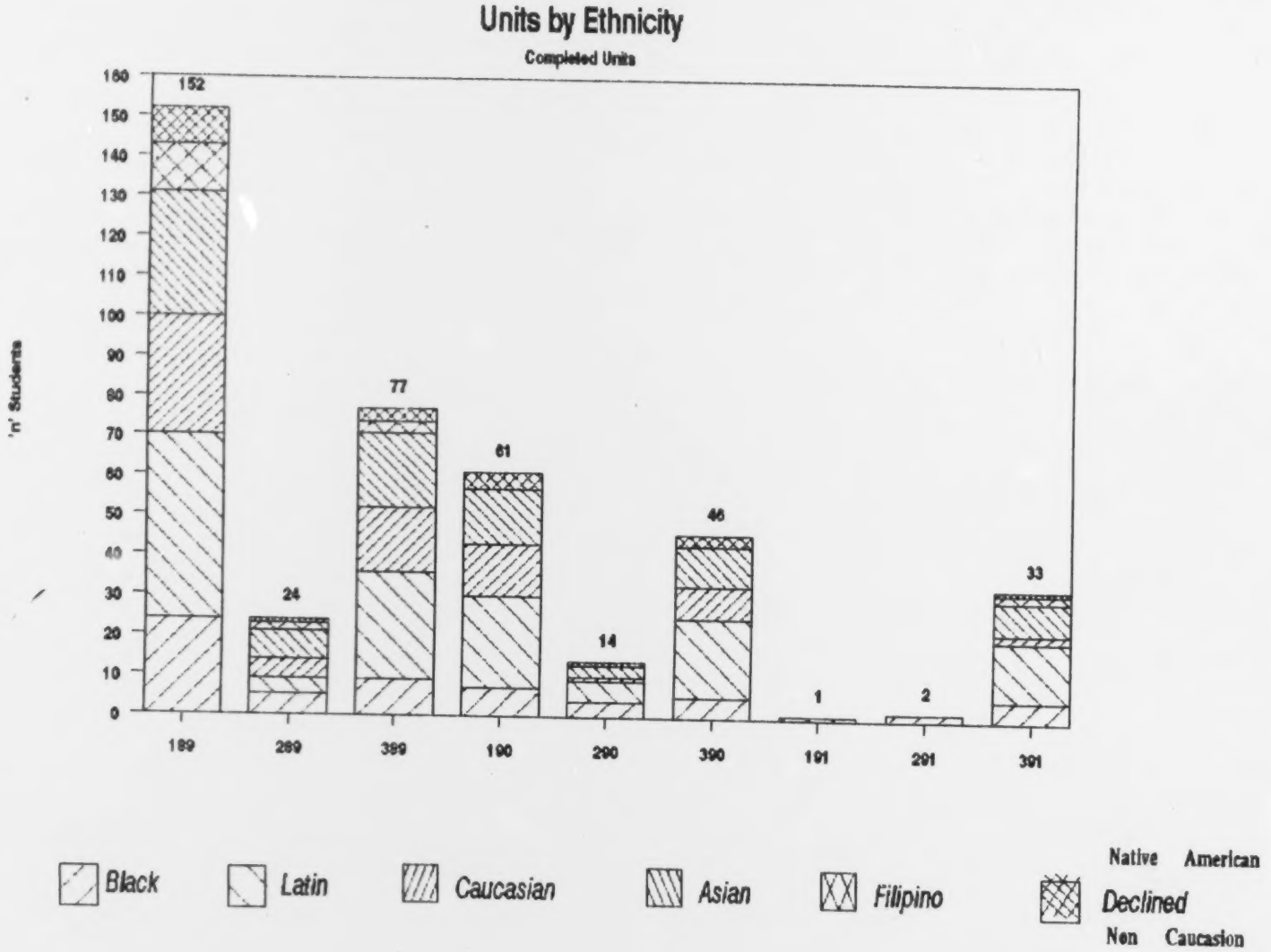

Units by Ethnicity
Completed Units
'n' Students
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
152
24
77
61
14
46
1
2
33
189
289
389
190
290
390
191
291
391
Black
Latin
Caucasian
Asian
Filipino
Native American
Declined
Non Caucasion

Table 2

We measured by those part timers who nonetheless were taking more than one class at a time, 4 to 8 units. The fourth group we measured included all those enrolled for at least 9 units. The full time minimum is at least 12 units, but those taking at least three or more classes seemed to be intent on some program and we wanted them separated out. Due to time constraints, we did not go back through the data and measure full timers separately.

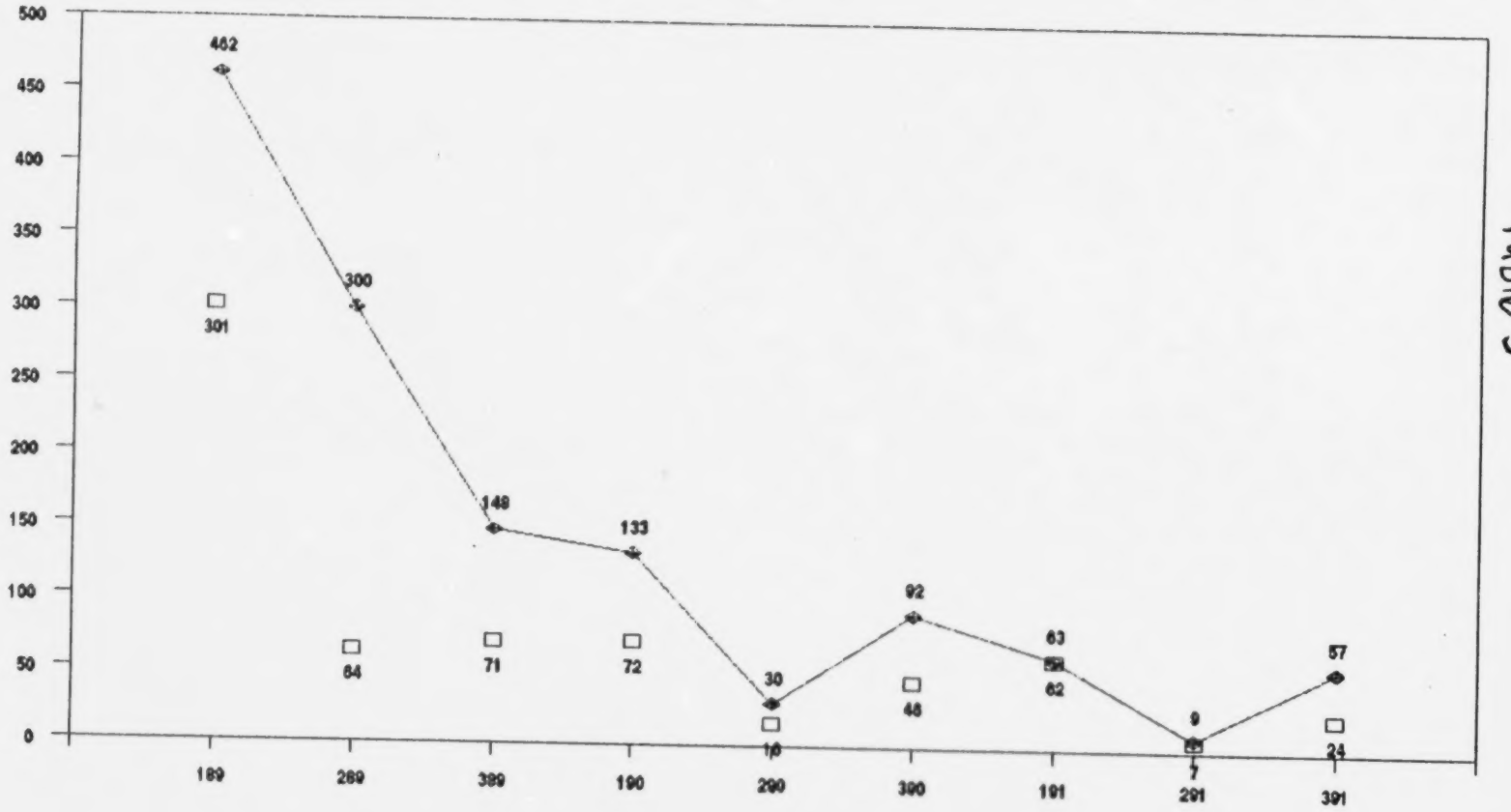
AGGREGATE VERSUS INDIVIDUAL MEASURES

We wanted to assess the sample with group information first and then go into measures on an individual level. Due to time constraints, we focused more heavily on the group data to show trends as a group. This allowed us to examine the successive units attempted, units completed, census figures, and other data showing possible trends of the sample group. See enrollment across the three year period in Table 3.

The individual data was limited but we did locate two individuals who obtained their Associate in Arts, liberal arts, in Spring of 1992. Added to these two are 29 students we located by identification number who are still enrolled at Los Angeles City College for the spring semester, 1992. These are the persisters. Bob Kort attempted to contact some of these persisters by telephone to ask what kept them pursuing education. A number of the telephone numbers were disconnected and of those he reached many did not speak English. One student he did connect with told him that counselors were not a help, but he did name some teachers who supported him in his efforts.

Range
0-500

Enrollment of Sample



□ Enrolled 'n' of Sample with 'ZERO' units completed per Semester.

◇ Total 'n' Students enrolled per semester

Table 3

DESCRIPTION

DISABLED STUDENTS

We originally wanted to know the completion rate of the three federally protected classes: ethnic minorities, disabled, and women. In our entire sample population of 462 students we did not have one disabled student to follow, defined as disabled in any of 8 ways. We checked to see if any entering were later reported disabled. Either no check is done or none of the sample was genuinely disabled. We did not have the opportunity to go back through the databank and select out a disabled group for analysis. Therefore, we suggest that a specific examination be done checking the class of Spring, 89, and "selecting if" disabled in any of the eight categories. It is possible that the students were afraid to identify themselves, fearing some reduction in their eligibility to enter. That the disabled program is worthy of attention is further demonstrated by the Disabled Students Appreciation Awards Program recognizing students, faculty, staff, and administrators who supported the LACC Art for the Disabled Student Program.

GENDER

See Table 4. Males comprised 44% of the students sampled in a Kirkwood college study (15), but comprised 80% of the graduates. 27.3% of males graduated compared to 5.4% of females. At LACC the only two graduates to date are female. There were 238 females in the sample group and 224 males. Gender based differences are discussed in the units completed section.

ETHNIC DIFFERENCES

Administration files were used to recheck fully one third of the sample to check accuracy of the MEDS data. Though a number of files were archived and archived files have no ethnic information according to Silvia in Admissions, the information that we could match was fairly consistent with the MEDS data. The largest body of students is Latino. See Appendix C. The number of units completed per semester by ethnicity is shown in Table 2.

CENSUS

We selected a sample of day, evening, and students attending both day and evening classes at LACC. See Table 5. The sample was consistent with population parameters.

USE OF FINANCIAL ASSISTANCE PROGRAMS

The students on EOPS and financial aid at Rancho Santiago College, in Orange County, had the highest completion rates among their students studied.(10) We were told, while analyzing the variables in the MEDS file, that some of the variables listed as available in the data file are actually place holders because the information is not entered. We found missing data in the categories of EOPS and financial aid. There were other sources for the information, but not enough time to pursue the alternative sources.

We tried to portion out those students who enrolled but completed no units for credit to pinpoint some common denominators that might flag high risk enrollers for immediate advisement or some kind of attention. Of the variables listed on the MEDS file

Gender Mix of Sample

'n' Students of Total 462 Sample

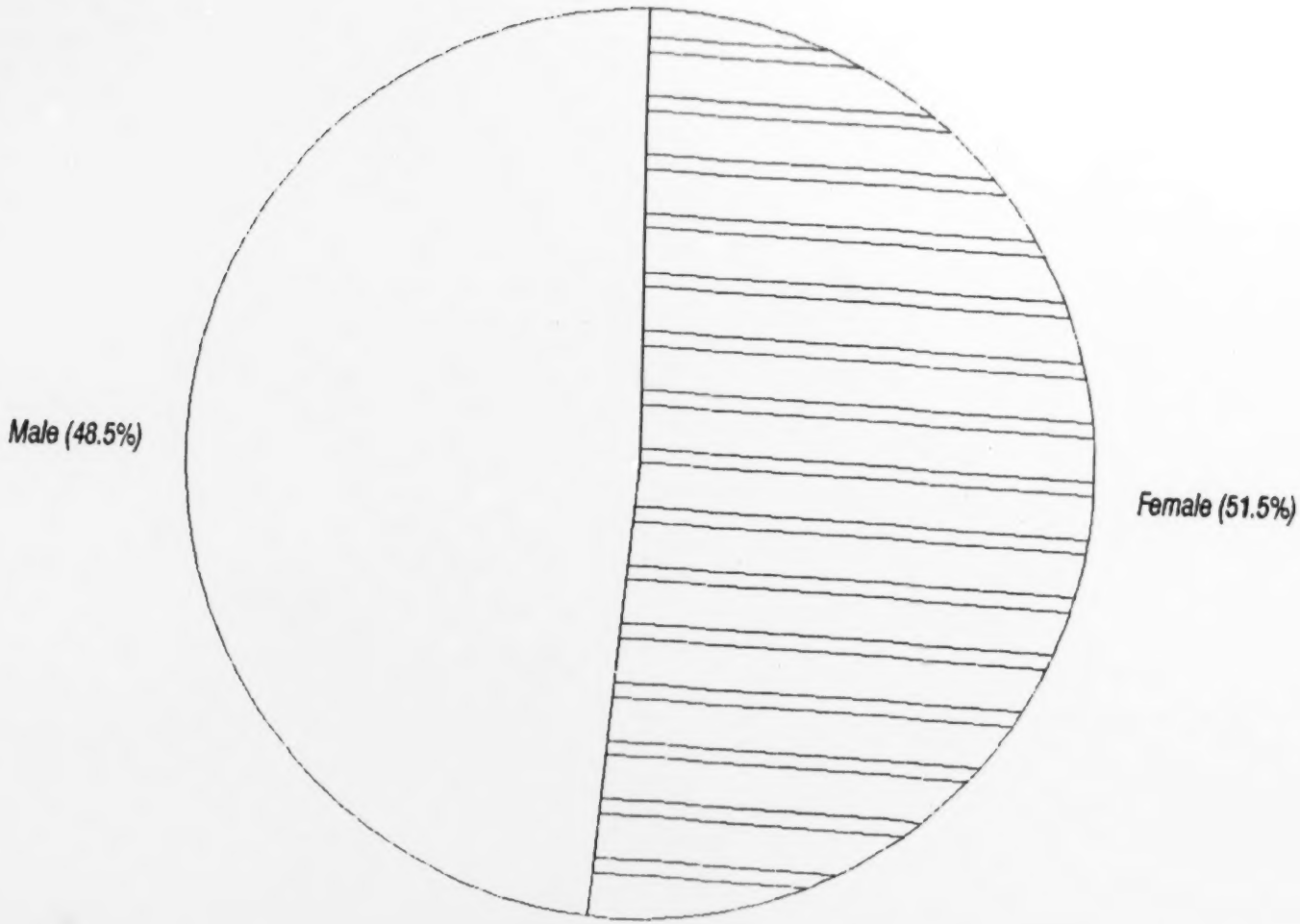


Table 4

Range
0-500

Census
of Sample 462

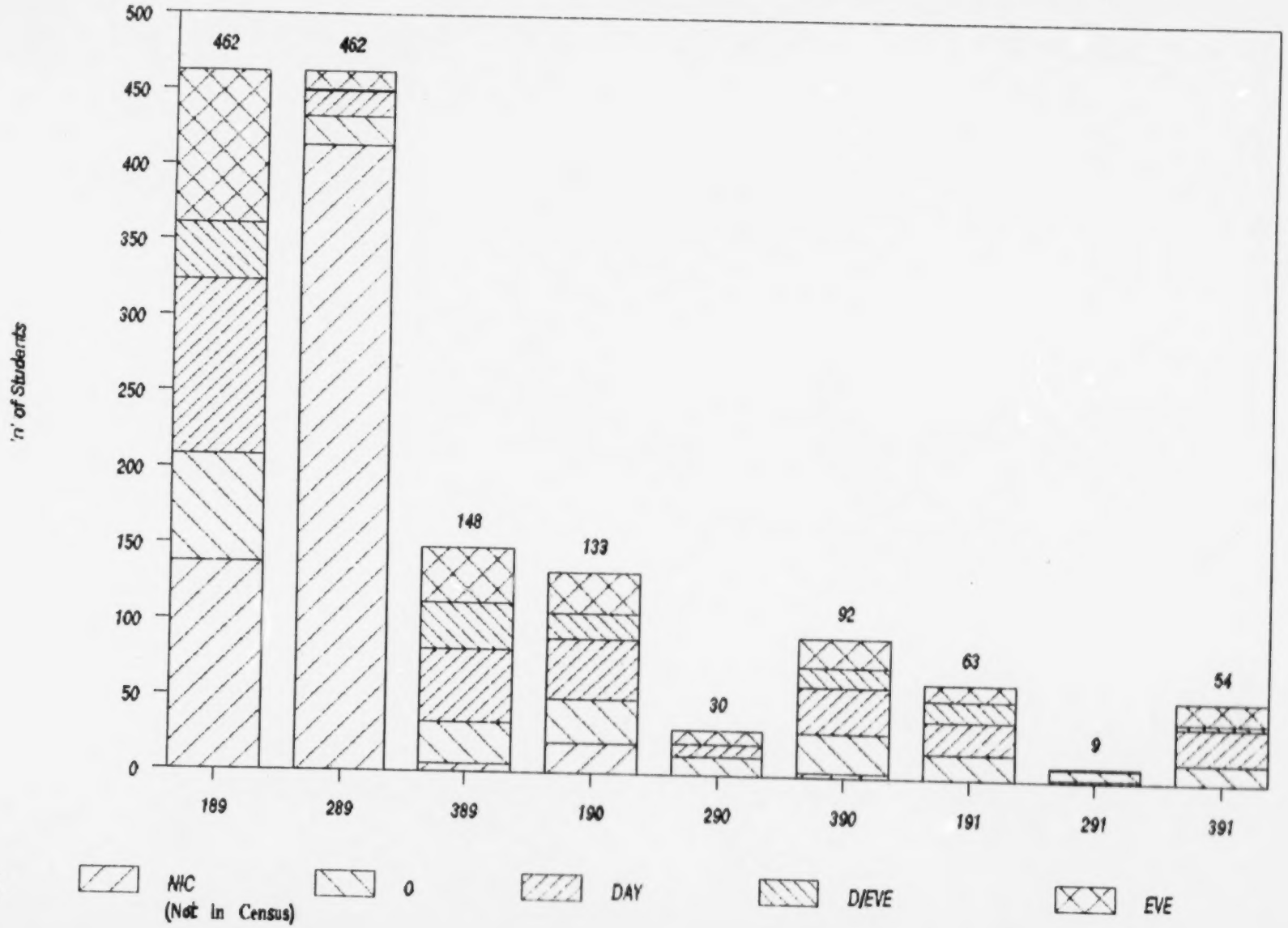


Table 5

we learned from a district source and from an LACC campus source that there is "no mechanism in place" to gather that data and that the district office is working on developing a method to get administration offices in different departments to record the times a student presents for assistance and other counts. This affected variables "type (type of district restriction), pro (on probation or not), vet (receiving veterans benefits), gflg (gains benefits), and mflg (matriculation services received).

Thus we found no count of veterans attending, though we don't know if this is true or merely incomplete data. Of the third of the sample compared to the administrative records no veterans were found.

PROBATION

We looked at academic probation and restrictions by the district to see if the 205 who never showed for the first census were caught in this screening net. "Type" was the presence of any district restriction placed on a student.

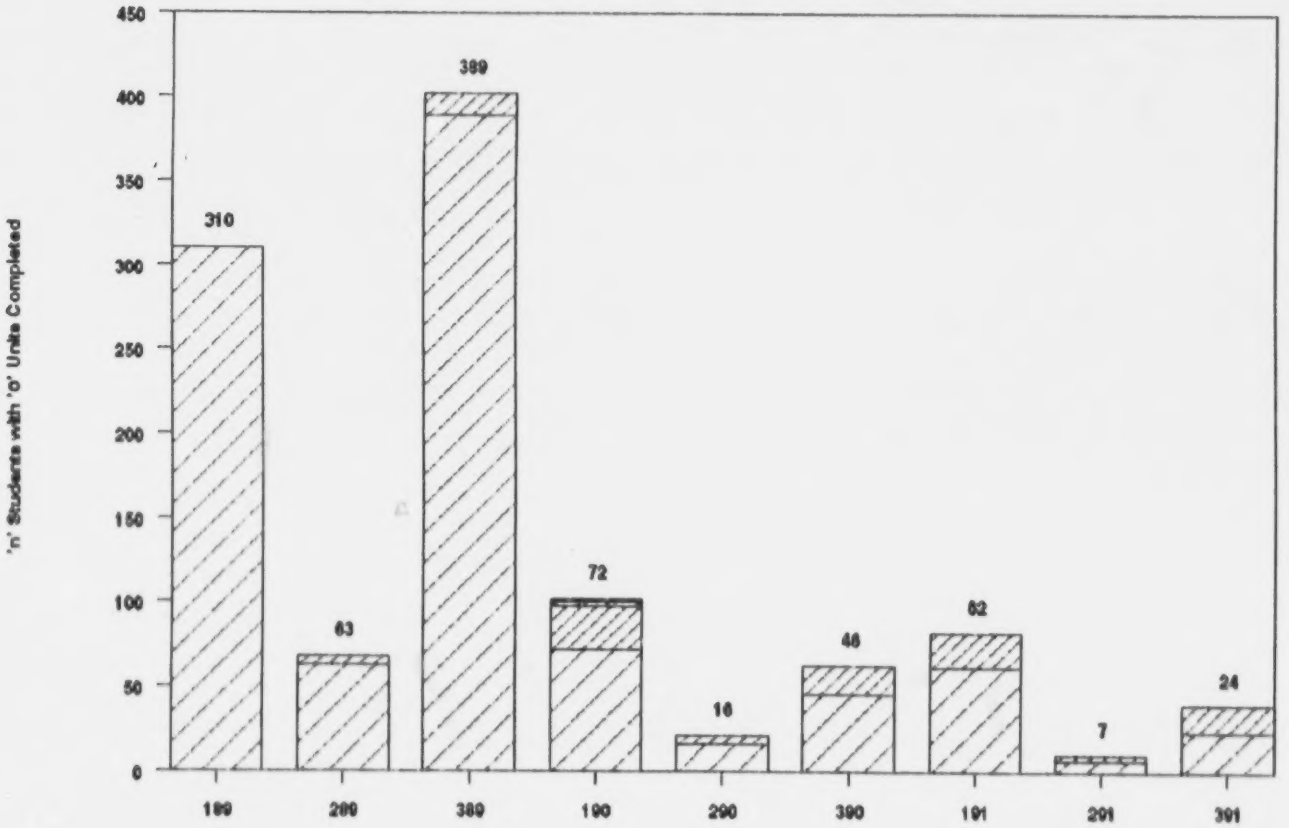
"Pro" showed the number on academic probation at any given time during the semester. We found an average of only 12 students per semester ranging from none to a high of 26 on probation per semester, even with the high numbers of students enrolling and then dropping out. The number on probation was not reflective of the actual numbers of students not completing units. The percentage of those on probation, whether campus or district, is shown on Table 6.

This data is aggregate. We did not have time to count again,

Range
0-450

Enrollment with Zero Units Completed

Of those with '0' completed units; 'n' on Probation and 'n' on District Probation.



'n' Students with '0' units completed

Those on Probation; Of Students with '0' units completed

Those on District Probation; Of Students with '0' units completed

TABLE 6

checking against Identification numbers to see if students were on probation one semester, clearing up their records and successfully avoiding probation after that or if the same students remained on probation throughout the three year time span. What was noticeable was that the large number of those registering and not attending were not caught in the probationary web. The generous amount of time allotted to students for dropping a class without penalty may encourage the large proportion of those enrolling each semester to drop classes when faced with the choice of pushing harder to finish or dropping a particular class.

AGE

We looked at the age of students enrolled by department to see if we could find majors that might interest individuals interested in updating job skills or training for a new career after a number of years in one field. We did not have enough data to surmise anything, but the age distribution is in Appendix D.

GOAL

We originally wanted to measure a correlation between goals with which a student entered and whether they reached them. If a student enters with the goal of "prepare for new career (new job skills), advance in current job (update job skills), or even to fulfill continuing education credits for a license renewal there is nowhere in the system where a student completing such a goal is noted. Whether a student takes only one class or one semester and completes what they intended or drops out because of stressors does not show on a printout of cumulative units completed. The goal

Goal Upon Entering School

Total 257 -of- sample 462 Students

Graph Range 0-210

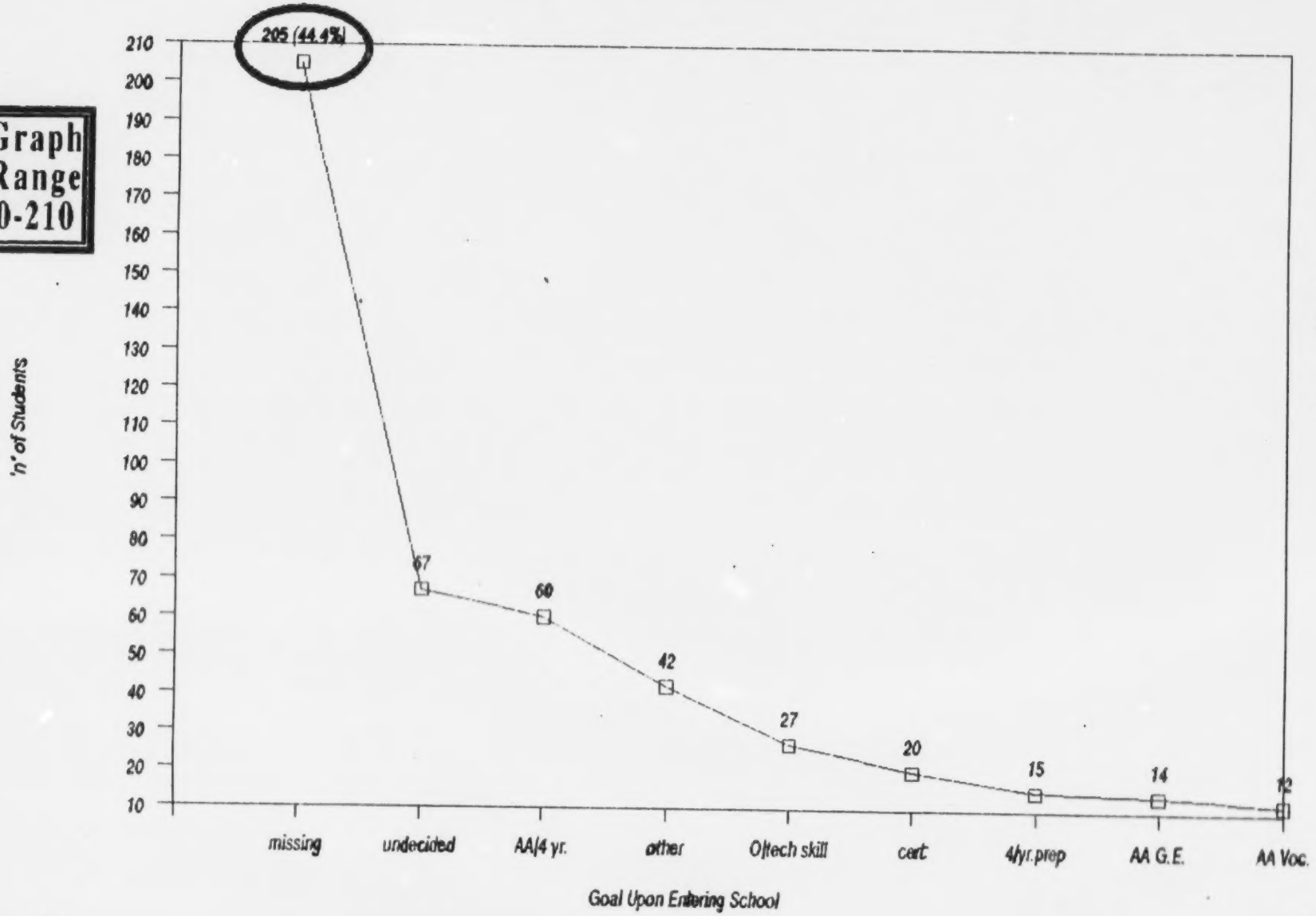


Table 7

would have to be compared with the classes they are taking and the students asked upon class completion if they had met their goals. Also, the specific classes were on separate files and the practical constraints on the scope of this study prohibited our pursuing in depth the comparison of goal entering to goal achieved.

The actual goals that students entered LACC with showed that 205 were missing data, 67 were undecided, and the greatest number of those reporting a goal (60) listed an Associate of Arts degree followed by transfer to a four year college. How much this is influenced by social desirability bias is uncertain. It is possible that some students entering check the goal they feel is most likely to get them a place in class. Being enrolled for a course or two for career advancement may be seen as a detriment to getting admitted. See Table 7 for the full distribution of goals upon entering.

TRANSFER

If the goal was to transfer we would not have a way of measuring the actual number of students who actually went on to enroll in a four year college, unless we counted transcript requests as an indication. President Robledo requested a measure of the specific transfer rate information of LACC. This was done by the Center for the Study of Community Colleges. They used the definition "all students entering the two year college in a given year who have no prior college experience and who complete at least 12 units, divided into the number of that group who take one or more classes at a university within four years.

The Center found that 1685 students entered the college in 1986 with no prior college experience and 1014 of them received 12 or more units there. 181 had taken one or more classes at CSU or UC. This yields a transfer rate of 17.9% from LACC compared to the statewide rate of 20.8% If LACC has the highest number of entering students who state their goal is to transfer to a four year college, and this is what district sources tell us, then the attrition rate makes a striking contrast.

PLAN

Whether or not students have developed an education plan, usually with the assistance of counselors, and when they finally developed such a plan were both examined. One person had developed an educational plan by the end of the first semester of enrollment. No one else developed a plan until 2 more by the end of the fall semester in 1989. This was actually the third semester for many of the sample, as 87 were enrolled over the summer. The enthusiasm was still present. A few developed a plan over the next two years, but at no time did more than 2% of the total sample have an education plan, ending the period with 12 of those still enrolled having a plan. A better system of monitoring students to encourage them to develop an educational plan seems needed.

PERSISTENCE MEASURES

THOSE WHO DROPPED THE FIRST SEMESTER

What we found was that of the original sample many filled out the application form but never showed even to be counted in the

first census of the class. This was a significant group of 205 subjects, or almost half of the enrolling students (205). Most of the sample never showed for the first census or dropped out with zero units completed (a total of 313 of the sample of 462). This phenomena is reported at every community college in Southern California with whom we made contact in an effort to understand our own study.

We looked for some significant difference between the population who quit at onset and those who persevered. We looked at several major variables including gender, department, and ethnicity. We could not see a significant difference in the review of first semester drop out rates.

COMPLETION RATES

The original goal was to count the number of certificates and degrees earned by the end of the three year time span. This question was answered early in the study by running a count of degrees awarded and certificates awarded each of the nine semesters examined (Spring, 1989, through Fall, 1991). None were awarded. Even summer sessions were examined, in the off chance that some graduate would leave uncounted. There were some summer degrees earned at other campuses within the district, but not any at LACC.

This was supported by an examination of the admissions office records as a backup check for the MEDS data. About one third of the total sample (approximately 139) was counted screen by screen, reverifying that data matched the MEDS report and reading for any degree or certificate that might have been awarded but not listed on

the MEDS data. No degrees nor certificates were found in this check step.

This news is not as dismal as it first sounds. We found two females who completed their degree requirements by February, 1992, and each earned an Associate in Arts degree in Liberal Arts. Neither woman had entered with a declared major. Neither one finished solely with 60 units. Each had several extra units. The common assumption made by administration is that students accumulate extra units because they enter the community college system aimlessly and take classes for one or two semesters before they focus on a major.

One LACCD student told me that she wound up taking at least one unnecessary class because her counselor had misread her transfer units and told her to take a class she didn't need. What portion of those completing with extra units was aimless or misguided remains to be assessed.

After the initial search for a count of degrees and/or certificates, we looked at the number of units attempted each semester and the number of units completed. This showed patterns of persistence among a portion of the original sample. Also, if a steady pattern of units completed could be plotted we could predict a trend with reasonable expectation of the time frame which was leading to degree conferral.

UNITS ATTEMPTED

The rate of students enrolling for classes each semester is higher than those who actually complete units each semester. No

Range
0-500

Units Attempted per Semester

per Semester Enrolled

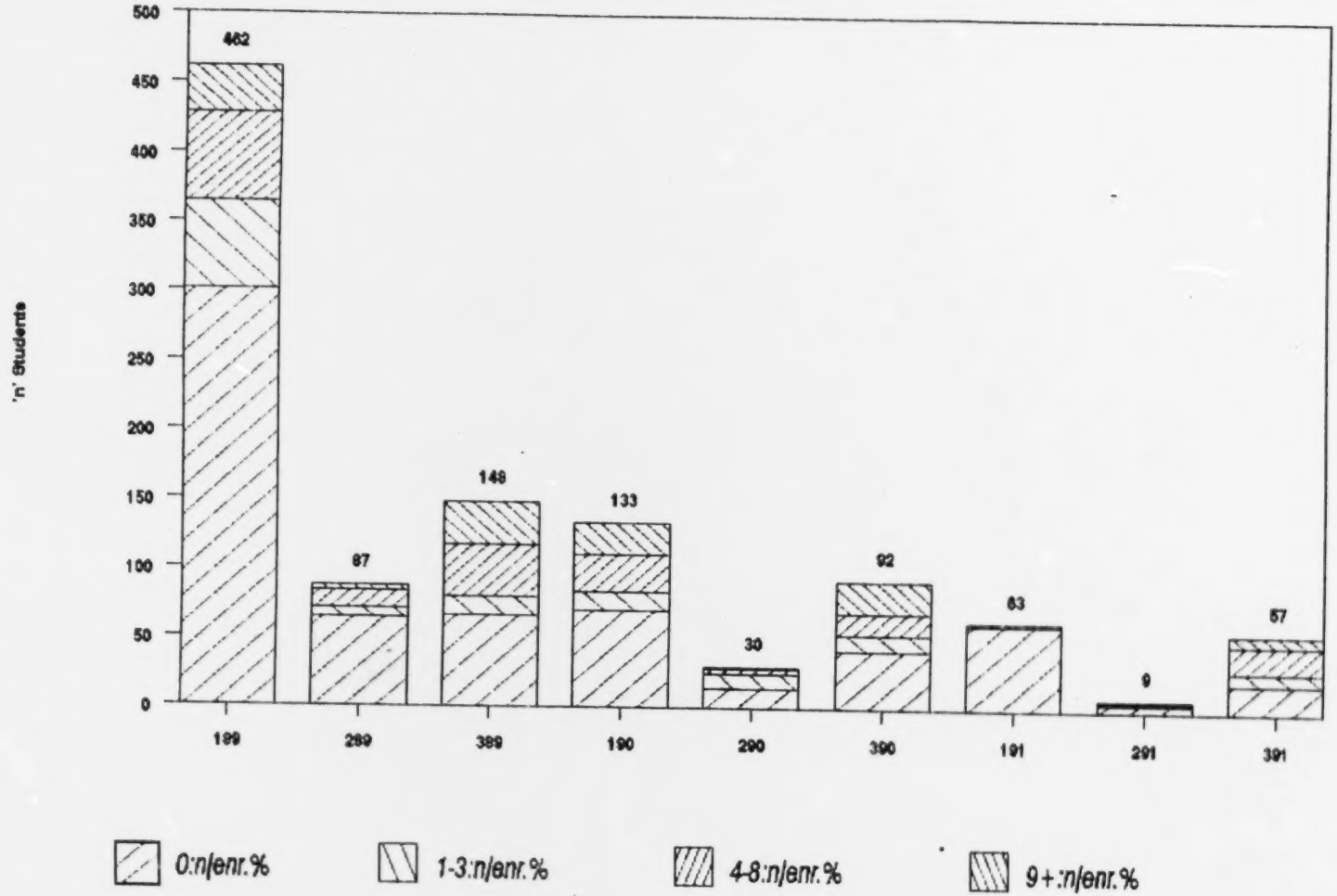


Table 8

Range
0-500

Units Attempted per Semester

percentage of total Sample per semester

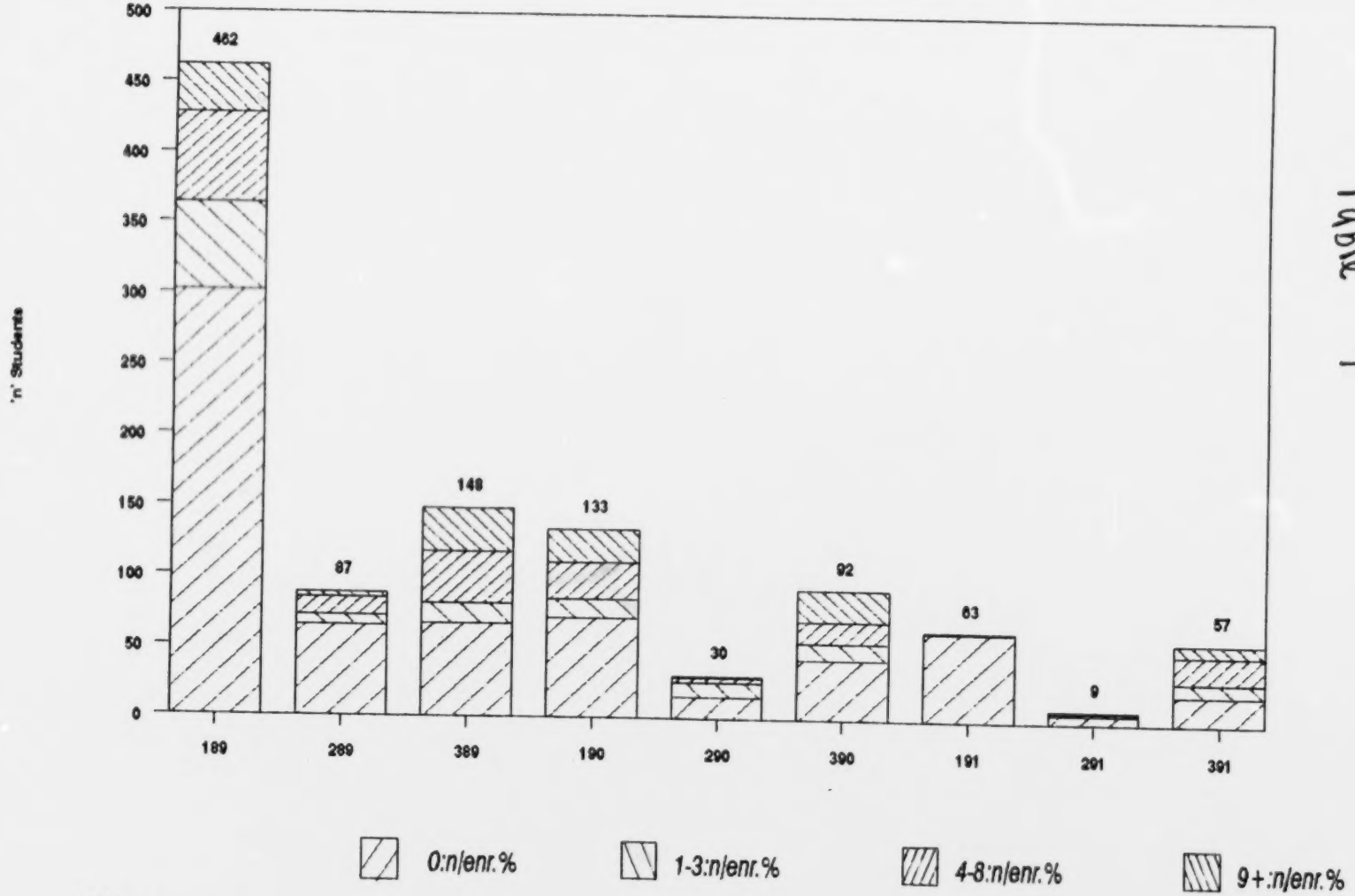


Table 9

semester shows this as strikingly as Summer, 1991, when 64 students enrolled and only one completed any units for credit. The reason for this contrast may be a schedule cut or some administrative act which was not the fault of the students enrolled, but which affected them. It also may be a need to show enrollment to collect some benefits, regardless of whether the student actually completes the class or not. We recommend investigation of the possible causes for the difference in units attempted versus units completed. Units attempted by the number of students enrolled per semester is shown in Table 8, while Table 9 shows the number enrolled by percentage of the total sample.

UNITS COMPLETED

We looked at cumulative units completed. One student keeps enrolling in music and never completing any units. Another woman has over 60 units in classes from a number of community colleges attended since 1985 but only completed one class at LACC and has not received an AA according to District records. One student has 51.5 units and has been working on them since 1981.

The number of actual cumulative units completed was felt to be a much better count of student persistence rates than merely units attempted. Students were assigned a value of "zero" if missing, for purposes of the count, and the units completed each semester were totalled up. Those earning any credit at all over the nine semesters were sorted into three groups:

1. from 1-29 units credit to date (showing some progress but not enough for a certificate)

Students with completed units, by valid I.D. numbers

Earned Cumulative Units 1-29 units	Earned Potential Cert 30-59 units	Earned Potential Degree 60+ units
11	42	116

Total number of Student who actually earned any credit during the three year sample period is '169', of the total Sample 462.

This is 36.58% of total sample

Range 0-200

Cumulative Units Completed*

by portion of Sample students

* this data is not orthogonal. Some individuals are repeated, but this chart reflects the trend over time-see graph.

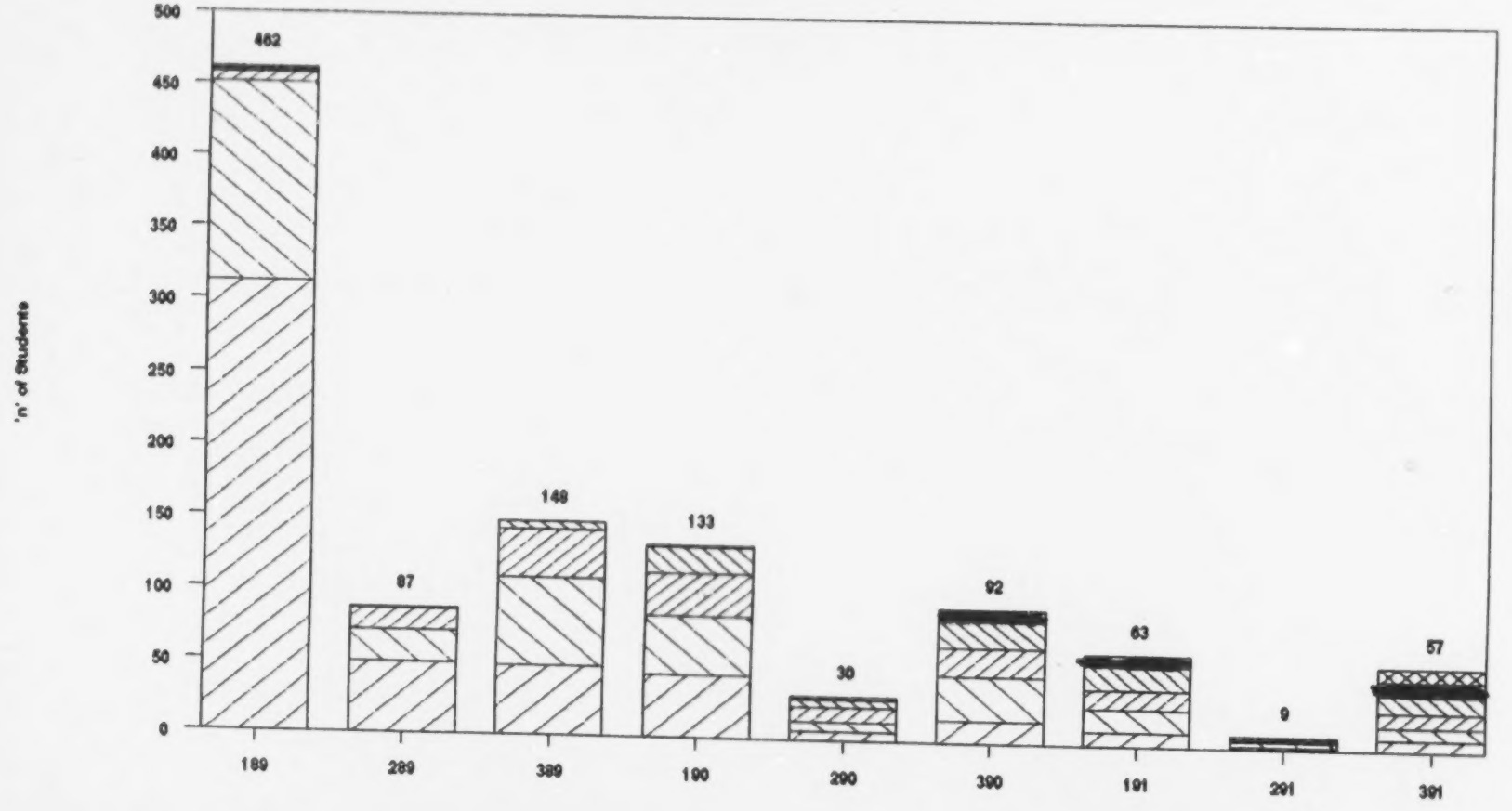


Table 10

'0' Units Completed

1-15 Units Completed

16-29 Units Completed

30-45 Units Completed

46-59 Units Completed

60+ Units Completed

13

11

2. from 30-59 units credit, showing a potential certificate group), and

3. those with 60 or more units of credit, showing likely degree candidates.

These results were not exactly what we expected from a previous examination of the data. The numbers showed more students with greater numbers of units than reenrollment figures led us to expect. After discussion with Sylvia, admissions supervisor, we concluded that this might be due to two factors. One point is that the number of units completed is entered on the MEDS data for registering students straight from the Application for Admission form which asks the student in section 26 for a self-report of the number of units or degree completed by the first day of the term (See Appendix E). This number may initially be inflated by a social desirability bias. Many students may not want to admit this is their first time at an institution of higher education. Once this self report is entered on the computer all proceeding semester units completed are added to it.

Another reason for a discrepancy in the data between the number of units actually earned at LACC and the number of units entered as "units completed" is due to enrollment over time at multiple campuses. One young woman had earned 61 units but still did not have a degree. Examination of her records by hand, using admissions files, showed she had earned units at four separate campuses, all within the LA community college district.

Other student units checked revealed a match to confirm the

accuracy of the number of units reported, or that students had attempted previous units, received no credit, but were counting them as "units completed" when responding to section 26 (See Appendix E). The actual number of students who earned credit units was 169 of the original sample of 462 (36.58%).

Units completed by semester by department is included for information on a narrower breakdown. See Appendix D.

CUMULATIVE UNITS COMPLETED

With the lack of completed degrees and certificates we looked at cumulative units completed and put the students into categories to show at a glance the pace at which they are working. The rate of progress is aggregate but can show a trend over time of persisters who are slowly but steadily accumulating college credits. The sample showed:

11 students earned between 1 and 29 units of credit, enough to show progress but not enough for a certificate.

42 students earned potential certificates as they earned 30-59 units.

116 students earned potential degrees with 60 or more units.

Now the one weak spot with this data is that it bases totals on the combination of the number of units students originally report to admissions and those they actually earn at LACC. The self report measures can be distorted.

The accuracy of the reports was checked by hand against the admissions data. One student was found to be counting all "0" credit courses for which he enrolled prior to the semester of

interest. Another student did not show any transfer units but still had not earned as many units as he claimed at LACC. Another student had units from 4 other campuses that totalled more than 60 units with the inclusion of the LACC units. The possibility exists not that the student is not interested in a degree, which is the interpretation put on students' earning more than 60 units and still not having a degree, but that the student was having to enroll to take further classes because not all units were recognized. This could not be determined from the data at hand.

UNITS COMPLETED BY GENDER

Completed units by gender is included in Table 11. This measure may be influenced by the two women who graduated in Spring of 1992. It is not orthogonal but as a comparison of mean number of females and males enrolled over time it was compared for significance. The mean number of females completing units per semester was 26.778. The mean number of males completing units per semester was 18.778. The difference was significant ($P < .01$, $z=3.815$). The two females who earned degrees in the Spring of 1992 certainly influenced the outcome. It remains to be seen if the population as a whole reflects that trend, or if future groups show a significant difference.

UNITS COMPLETED BY ETHNICITY

Preliminary examination of the data showed no significant differences between groups. Analysis of data was limited due to time constraints. Completion of analysis of variance is suggested for future studies.

Number of Students with Completed Units,
by Gender

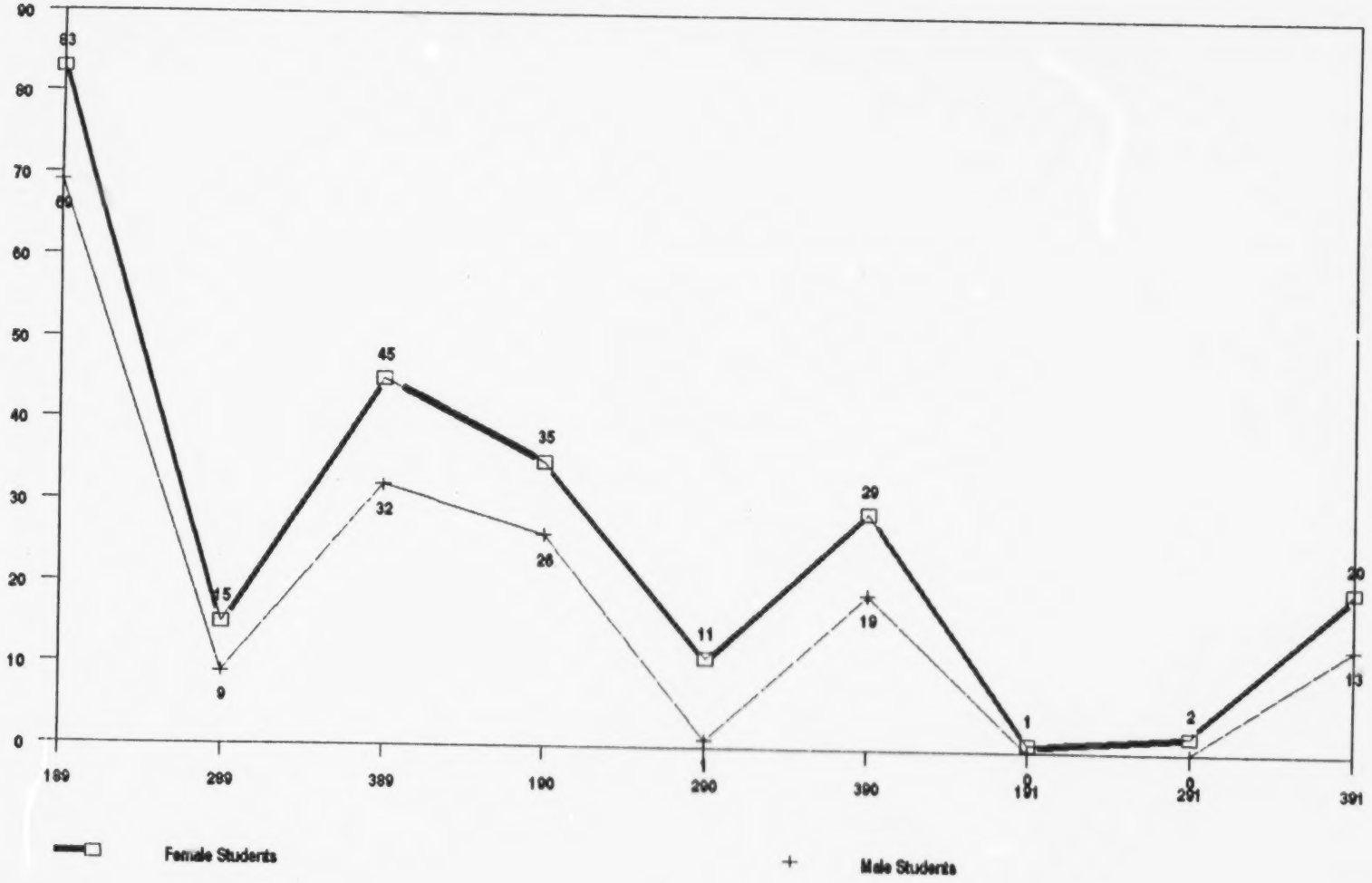


Table 11

MAJOR

Table 12 shows the large number of students with no declared major and those in the group whose majors were discontinued by the school after they enrolled in the area. Because of the large number of individual majors reported, we grouped them into departments and included all discontinued majors as one category.

We originally wanted to correlate major with degree or certificate earned. Of the two graduates who received AA degrees in Spring, 1992, neither one had a declared major. Because there were no degrees or certificates recorded as earned within the three year period we went back and measured persistence rates by enrollment under each major.

The largest departments and the group of students with undeclared majors are graphed for examination. Notice that across departments the same attrition continues, e.g., in Business of 42 enrolled only 6 are enrolled in Fall, 1991, and half of them earned zero units credit. See Appendix D. This shows the number of students by category of units of credit: zero units of credit earned, 3 units or less (the equivalent of one class or less), 4 to 8 units (part time), and 9 units earned or more (showing those intently pursuing the degree). We wanted to provide some information by department, but the numbers were so small in the sample that only a few departments are graphed in Appendix D. A substantial group of students had enrolled for various majors which have since been discontinued by LACC. We also showed this group which was interesting because after the declared major was

All Majors

'n' Students of Total 462 Sample

Graph Range 0-462

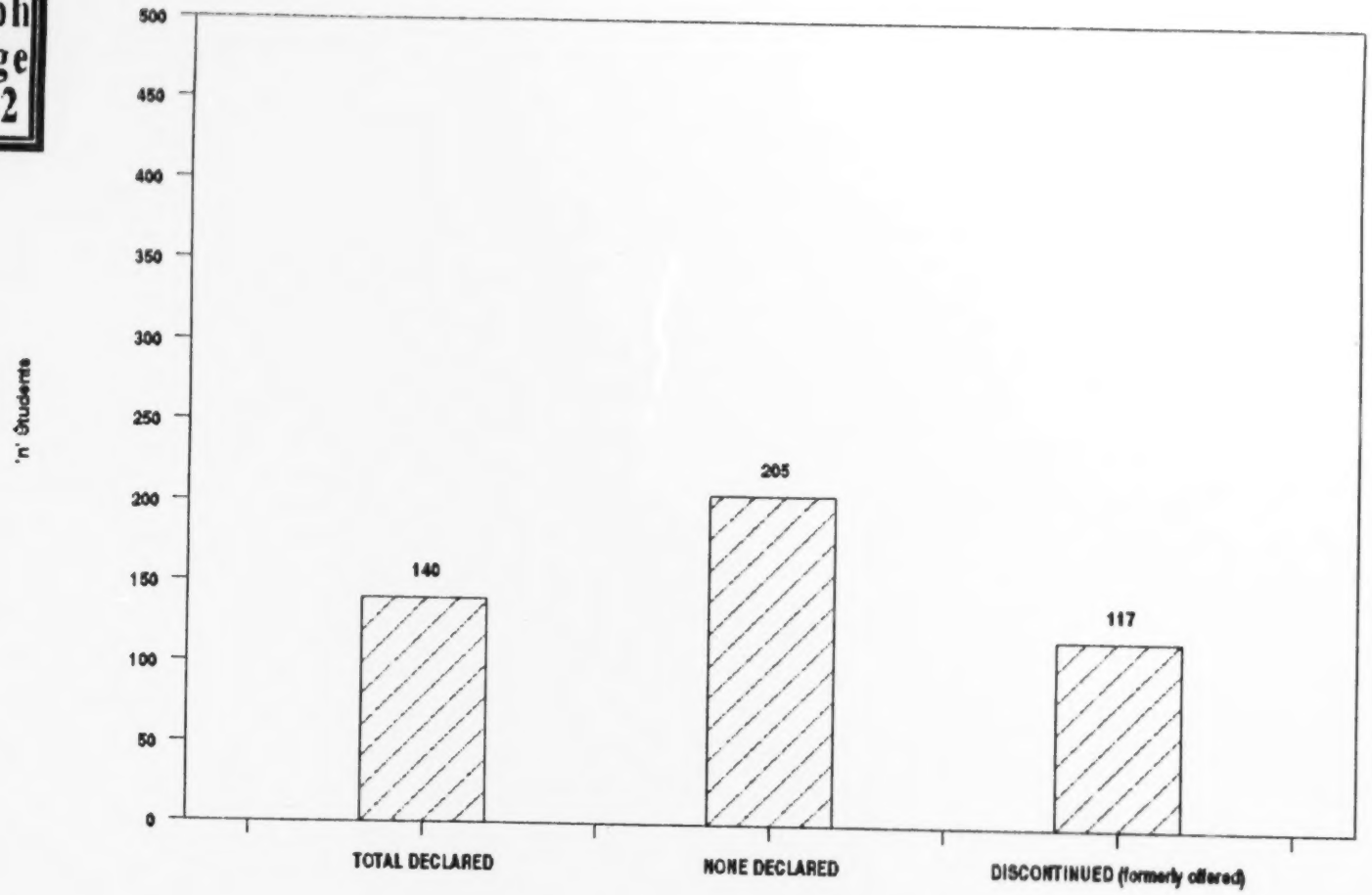


Table 12

discontinued a substantial number of them continue to enroll. What this means remains to be interpreted in a future study. They may have decided to take related classes whether or not they receive recognition of the major in the form of a degree or certificate. They may have redirected themselves to a different major. This did not show in the data we accessed.

See Table 13 to view declared major by gender. There is not a large enough sample to measure a significant difference. Table 11 shows the distribution of students in the sample among the declared majors by department.

In a 1984 study, Kirkwood Community College (15) found that 95% of the students were liberal arts majors and only 5% were career oriented majors. This contrasts with LACC students among which sample group we found 205 students with undeclared majors out of a sample of 462. Even if all 205 were liberal arts majors, general education not listed in one of the various departments, that still would only be 44%. The number of declared career majors, however, is 140 in current majors and 114 students declared in majors which were since discontinued. That is a total of 254 of a sample of 462. This is about 55% which likely reflects the greater pragmatism of a poor and minority population.

Germanna Community College in Virginia (16) examined full time students with declared majors only, but even then they found 25% no longer enrolled by the end of the first term and 50% dropped out by the end of the first year. Also, they found 75% of them neither enrolled nor graduated by the end of the five year study.

Majors by Gender

		Dept Code*	Female	Male	Total
discontinued	disc.		68	49	117
undeclared		Ø	101	104	205
ART		2	4	1	5
BUSI.		3	16	26	42
CHEM.		4	Ø	1	1
COMP.		5	2	5	7
ENG.		9	10	12	22
FAM		10	7	2	9
F-LANG.		11	1	1	2
LAW		12	3	1	4
LF-SCI.		15	2	1	3
MATH		16	Ø	1	1
M-ARTS		17	1	2	3
MUS		18	2	4	6
O-ADM.		19	6	1	7
P.E.		21	1	1	2
PHYSICS		22	Ø	1	1
PSYCH.		23	4	1	5
R-TV-F		24	5	3	8
SOC.SCI.		25	1	Ø	1
SPEECH		26	1	Ø	1
THEATER		27	1	Ø	1
TRANS.		28	Ø	2	2
RAD.		29	2	5	7
Totals			238	224	462

Major	Codes
discontinued	disc
undeclared	0
ART	2
BUSI.	3
CHEM.	4
COMP.	5
ENG.	9
FAM	10
F-LANG.	11
LAW	12
LF-SCI.	15
MATH	16
M-ARTS	17
MUS	18
O-ADM.	19
P.E.	21
PHYSICS	22
PSYCH.	23
R-TV-F	24
SOC.SCI.	25
SPEECH	26
THEATER	27
TRANS.	28
RAD.	29

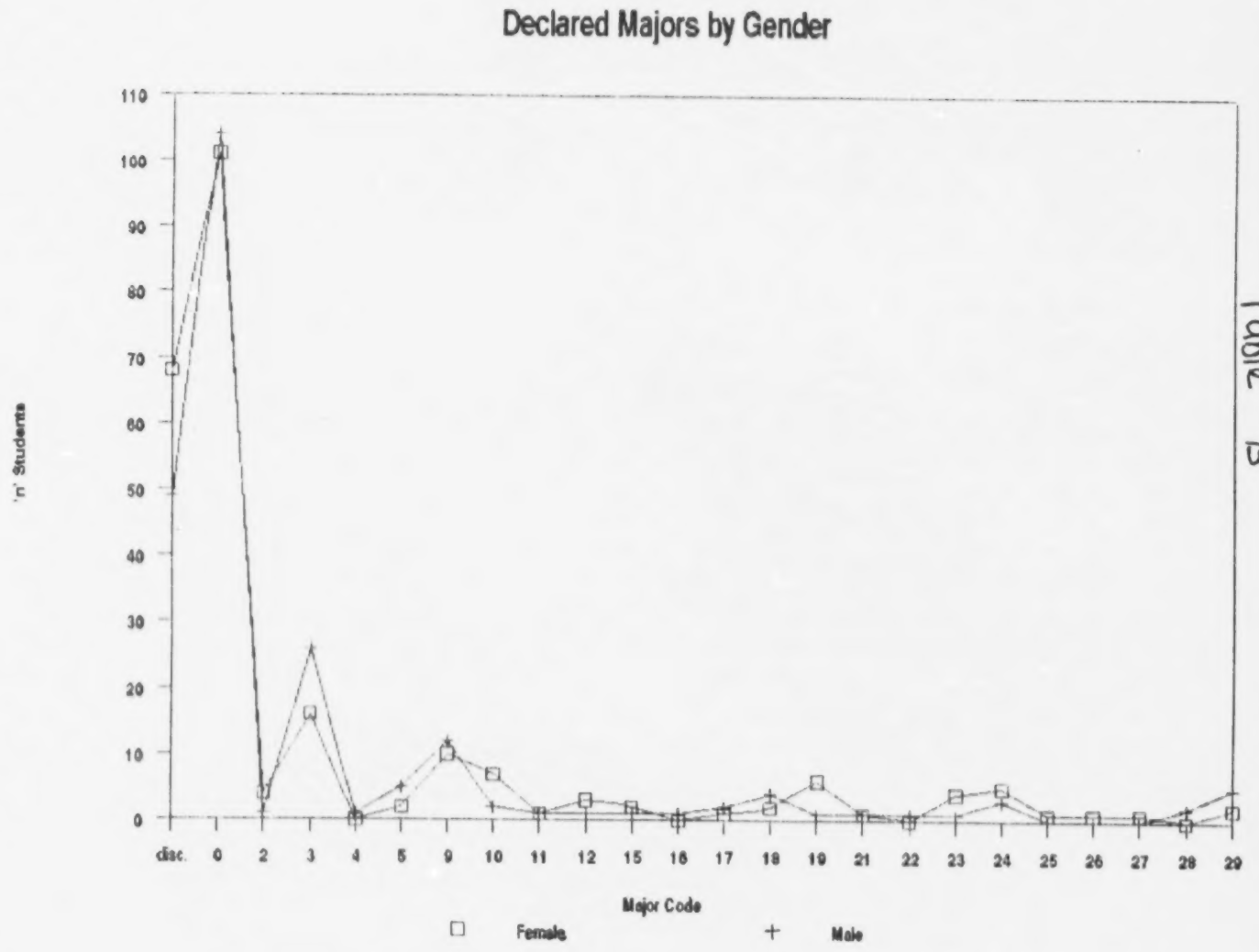


Table 13

TABLE
DECLARED MAJOR

	DEPARTMENT	N
0	NO MAJOR DECLARED*	205
2	ART	5
3	BUSINESS	42
4	CHEMISTRY	1
5	COMPUTER TECH,ELECTRONICS,ARCH.&ENG.	7
9	ENGLISH	22
10	FAMILY & CONSUMER	9
11	FOREIGN LANGUAGE	2
12	LAW	4
15	LIFE SCIENCE	3
16	MATH	1
17	MEDIA ARTS	3
18	MUSIC	6
19	OFFICE ADMINISTRATION	7
21	PHYSICAL EDUCATION	2
22	PHYSICS	1
23	PSYCHOLOGY	5
24	RADIO-TV-FILM	8
25	SOCIAL SCIENCE	1
26	SPEECH	1
27	THEATER	1
28	TRANSPORTATION	2
29	RADIOLOGY	7
	TOTAL DECLARED	140
	DISCONTINUED MAJORS (WERE FORMERLY OFFERED):	
300		92
20000		4
50200		7
70301		2
80100		1
100100		1
120301		2
120310		1
120600		2
121100		1
210500		1
220211		1
490100		2
	DISCONTINUED TOTAL	117
	TOTAL SUBJECTS	462

* THE TWO WHO OBTAINED AA DEGREES IN FEB. '92 HAD NO DECLARED MAJOR.

Range
0-50

Declared Majors

'n' Students, of 140 'Declared', by Department

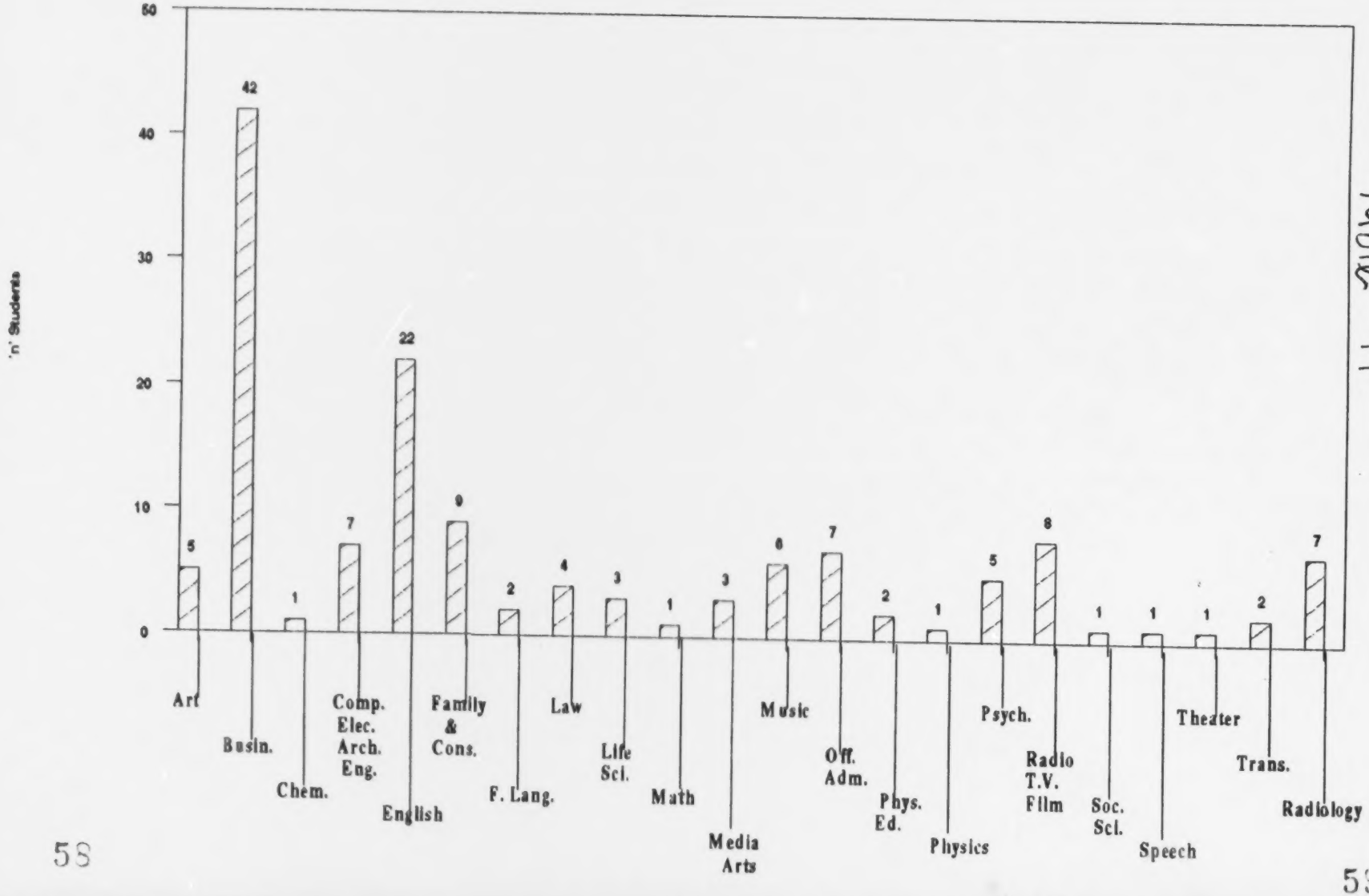


Table 14

Apparently declaring a major does not improve persistence.

MATRICULATION SERVICES

There are five matriculation services: admissions, orientation, assessment, counseling, and follow-up. See Table 15. Of these five steps, by the end of the measured period all but 18 of the sample of 462 were admitted. 125 show completion of orientation with 283 not exempt from orientation but not completed either. This contrasts with the Florida community college program which introduces new students with a 10 week course (see elsewhere). This lack of orientation may contribute to drop out rates. The assessment step was completed by 125 students, approximately 27% of the sample. The counseling or advisement step showed one student had been recorded as receiving such service. The follow-up step showed ~~no~~ one student receiving service (.2%), with missing values for only 18 of the sample, 39 exempt from such follow-up, but 405 not exempt and not followed up.

Students may truly be receiving the care but it is not being recorded. If these figures are accurate this may contribute to drop out rate. Input from students was that the attrition rate at LACC is due to "lack of student services."

At another LACCD campus a student said it took three years to get her degree in "spite of the counselors." She spoke as if counseling was an impediment. It turned out that her counselor had misread her transfer credits and assigned required classes that she did not need. Thus, she wound up taking unnecessary classes and graduated with more than the required number of units. When

looking at the number of units earned by graduates, we are inclined to say they did not know what they wanted when they entered, they switched majors, but this case suggests that we not jump to conclusions.

Rancho Santiago College (RSC) found that matriculated students persisted more than nonmatriculated students when they received services. As early as the third semester 58% of RSC students who were matriculated were still persisting versus only 25% of the nonmatriculated student group. We wanted to check use of the five steps of matriculation within the sample selected, but were advised by Rebecca Tilberg of the District Data Center that portion of the data is being developed and that there is no mechanism in place yet to gather or record the data as students use the services. RSC did find that evening students were the poorest persisters, though the matriculated evening students did persist at a higher rate than the nonmatriculated ones.

TABLE 15

MATRICULATION SERVICES/PERCENT OF SAMPLE

	EXEMPT	MISSING	NOTCOMP	COMP
ADMISSIONS	0	18	0	444/96%
ORIENTATION	36	18	283	125/27%
ASSESSMENT	36	18	283	125/27%
ADVISEMENT/COUNSELING	39	18	404	1/.2%
FOLLOWUP	39	18	405	0

TOTAL SERVICES RECEIVED BY END OF THREE YEAR PERIOD: FROM SAMPLE OF 462.

Range
0-462

Matriculation Services/ Percent of Sample

Total services recv'd by end of 3yr per./ sample 462

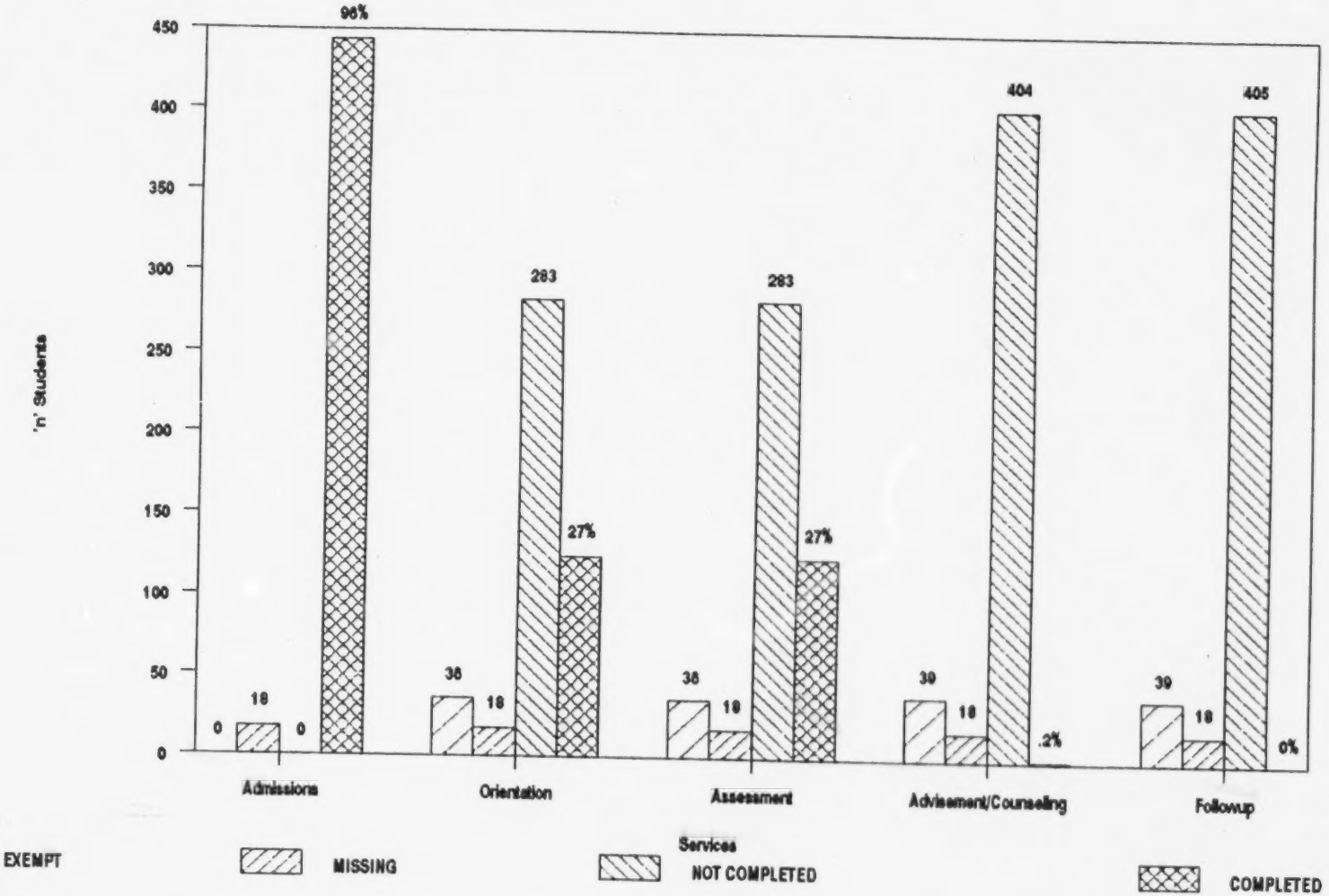


Table 15

SPRING, 1992

Looking at the 29 persisters still enrolled in Spring, 1992, only one student has a dummy identification number (Appendix B). The rest are social security numbers. It would be interesting to see if citizenship might have a significant relationship to persistence. From the examination of the data that we were able to accomplish within time constraints we did not find a correlation.

Bob Kort attempted to interview as many of the persisters as he was able to reach. He planned to probe for input on what made them persist, how they coped, how helpful school administration was, and a variety of pointed questions. He only succeeded in contacting one, due to disconnected telephones and a number of people who answered the telephone speaking only Spanish.

CONCLUSION

RESULTS COMPARED WITH OTHER STUDIES

Paul Dillon found 25% of all graduates district wide had received the degree after only three years or less. some of the graduates had transfer units from other colleges outside the district. In our sample we found no recorded degrees or certificates by the end of three years, but we did find numbers of students who might have qualified for certificates (generally 30 units) or degrees because they had an adequate number of units completed for certificates or degrees.

Dropout rates at Virginia Community Colleges based solely on full time degree seeking first time enrollers showed 30% dropped by end of the first semester and about 55% enrolled at the start of the second year, with only 45% left at the end of the second year. By the end of four years about 20% had graduated.(17)

Palomar college examined retention rates of students first enrolled 1983 through 1985. They found retention was about fifty percent at the beginning of the second semester, dropping to about 15% after three years for 1983 and 1984. Then, in response to some program they may have instigated, their awareness of the attrition rate, or just chance, there was a rise in retention from 1985 to 1987 cohort groups until between 20 to 25% were reenrolling. The first few degrees were awarded beginning after three years enrollment. There were also a few certificates and these began to be awarded after two and one half years.

Palomar looked at GPA for fall 1986 first time cohort to check a

correlation with retention rates. Dr. Barr measured the retention rates counting students with "w" for withdraw as persisting, since they enrolled even though they did not complete the course.

The difference between the highest GPA group (3.5+) and the lowest (below 2.0) looks like it might show significance, though this was not reported. Our sample was not examined for GPA and a possible correlation with retention, due to time constraints. This measure is suggested for future study.

A study by the U. S. Department of Education showed that less than 20% of community college attenders earned an associate degree over a twelve year period. (18)

Parkland College found that the ethnic distribution of degrees and certificates awarded corresponded to their minority enrollment rates.(12) Our data revealed no degrees or certificates awarded as of Fall, 1991, but we did find two women who obtained their degrees in Spring, 1992.

CONCLUSION

For the past two years, there has been a federal requirement that information as to the student graduation and attrition rates be available for examination by students applying to a four year college program. This law is based on the completion rates after time elapsed of 150% the amount of time claimed necessary to complete the program (2). This law, Title I, Section 102, states that students have a right to know the completion rate by graduation, rate of certificate completion, or transfer for a four year degree. It was written with the assistance of the National Institute of Independent Colleges, and particularly addressed to four year academic programs. It is currently being used as a guide in design of a monitoring standard for the community colleges. Bob Kort had originally suggested a three year period for examination of the completion rates at LACC because it is ostensibly called a "two year college." Thus, 150% of the time would be three years. Additionally, we only had data available for examination as of a fairly recent period and this contributed to our decision.

We have since learned that the Los Angeles Community College District office produced a study showing the average length of time for an LACCD graduate to obtain a degree is about 4.25 years. This is less time than a Chicago community college study which showed students there take about 5 years to complete the "two year" program.

The two year college is a misnomer, according to a researcher of the United States Department of Education, Office of Statistical

Research. He said they have "absolutely no data" on continuation or completion rates of community college students. Their focus is on the four year schools. He stressed that the community college is "all things to all people." Some come for job skills, for language skills, for the amnesty program, avocational reasons, and some for transferable units to complete a degree at a four year college.

Paul Dillon of the Los Angeles Community College District Office wrote a report in 1990 titled The Myth of the Two Year College.(11) He found students took from one semester to as much as sixteen years to complete their degrees. Students entering before age twenty and those entering after age 35 finished most rapidly, but it still took them 4 and 3.5 years respectively. His figures were taken from the Spring, 1989, graduation class.

Molly Squire, one of the authors of this project, completed units at 9 community colleges in Southern California before obtaining her Associate of Arts degree. People move. They change direction. Also, the community college is the least expensive form of higher education. Poor people, to whom income and physiological needs precede self-actualization in a very obvious way, are more likely to attempt to obtain a college degree without relocating to go to a four year college, without stopping their employment, and possibly are slower because they are more afraid of failure due to lack of family support, lack of role models, and a feeling that their goal might overreach their grasp.

COSTS

The costs in lost human resources from denying needed classes to students attempting to enroll who are locked out by full rosters, of which a substantial proportion will drop out before the first class census are considerable. The proportion of students left in the classroom drives up the cost of instruction per student. The extra administrative time and paperwork is also a hidden cost factor.

The sad fact is that many students will need to complete the course if they expect to increase the chances of obtaining a job which will pay enough for them to pay back student loans.

Adelman found that more students who earned the A.A. degree wound up in professional jobs than four year college students who failed to earn the B.A. Clearly, the community college is in a position to develop an effective program for encouraging students to persist and thus make more efficient use of the college resources than the current pattern of a fifty percent drop out rate in the first semester.

SUGGESTIONS

Currently, there is no attempt to check a student's past enrollment performance. Do they complete units attempted? Do they continue to sign up semester after semester and then drop with no earned credits? Some of the sample appear to be doing just that.

Other colleges have developed special programs to increase the retention of students. Florida Community College offers a FAME program (Factors Affecting Minority Enrollment) for minority and

low-income high school students. This includes a 10 week precollege orientation focusing on the degree and certificate programs available, a 7 credit summer program including a course on "Student Success", "English Composition I" and a social science course. After attending this program, 52% of the FAME students enrolled on a part time basis. The drop out rate was marked even completing the initial program. But, the persisters were mentioned in a paper by Coleman & Bolte which mentioned the increased requirements as well as the increased demand that speech be one of the classes completed toward a degree. This paper said success rate of Hispanics completing an associate degree rose 3% and Blacks and Hispanics completing a baccalaureate degree increased by 1% after instituting the program, while national norms declined one half of one percent.(14)

Other services mentioned by students as desired include a student manual with "how to get around the system" questions in it. They suggest a manual with questions commonly asked, contributed by each department, where they can look up answers and know how to pursue their particular goal or solve a problem. One student complained that since she enrolled the District had changed requirements in the number of units needed for one class. She had completed the required amount of class time but was only recognized as having partial units. She found out by accident that she could petition to have her credits recognized as completed. Such a dilemma could be an example in a manual. In view of the fact that most classes are taught by part time instructors with no office

hours, and counselors are few for the many students, such a manual would supply support to many lost students who are complaining of neglect. Currently, there is not a measure of the number of students persisting relative to the number of classes for which they register taught by full time faculty versus part time staff instructors. The actual correlation of persistence with availability of instructors for counseling and encouragement is an unknown factor. Some Latino students complained about the promised services at LACC which never materialized. One white female complained that there was no aid for her equivalent to that she perceived as available to minority students. Book prices are a cause for concern of many students.(19)

An introductory worksheet showing estimated costs could be distributed with each application. One student suggested a requirements sheet stating expectations of what must be done prior to just showing up for the first class. This student pointed out that many students entering for the first time are not knowledgeable about things the system takes for granted, such as how to read the book shelves in the bookstore and selecting the text prior to the class meeting.

One program evaluation process pilot tested on 38 vocational-technical programs measures completion rates as one of ten items evaluated. This program has been used by over 120 technical and community colleges in the United States and Canada. It measures some items which, to our knowledge, are not on the MEDS files. These include average class size, program costs, and success of

those who leave the program as well as graduates.(13)

TEMPLATE

We have compiled a relatively step by step template of the study showing what files we obtained, how we value labelled the variables, measures done, and information generally thought to be helpful for anyone doing a similar study. Though we did not have enough time to do as much analysis as we anticipated, we hope this step by step guide will be of some use. The template is attached under separate cover.

REFERENCES

(1) Los Angeles City College Population Profile May 7, 1991, unpublished internal report. page 50.

(2) Public Law 101-542 (S. 580): November 8, 1990, Title I Sec. 102 (2) and Sec. 103 (2). 104 Stat. 2381 and 104 Stat. 2382.

(3) Form DPS-046, MEDS Documentation. Los Angeles County Data Processing Branch, March 19, 1991.

(4) Garner, Ruth. 1992. "Learning From School Texts." Educational Psychologist, 27(1), 53-63.

(5) Report No. OR9103 DK, "Fall 1991 Student and Enrollment Characteristics by College." December 1991. Office of Research, Planning, and Analysis, Educational Services Division, Los Angeles Community College District.

(6) Report No. AID-003-GDK Annual Information Digest. May 1991. Office of Research, Planning and Analysis, Educational Services Division, Los Angeles Community College District.

(7) Morawski, J. G. 1992. "There is more to Our History of Giving: the Place of Introductory Textbooks in American Psychology." American Psychologist. Feb, 47(2), 161-169.

(8) Fredericksen, M. Pathways of Student Persistence September 1991. Rancho Santiago College Resource Development Report.

(9) Dillon, Paul. 1990. The Myth of the Two Year College: Length and Variation in the Time Students Take to Complete Associate Degree Requirements. Los Angeles Community College Office of Research, Planning, and Development. 21 p.

(10) Hecht, A. Student Ethnic Diversity at Parkland College. 1991. Parkland College, Ill. 15p.

(11) Friedel, J. N. 1989. The EICCD Program Evaluation Process: A Primary Data Source for Strategic Planning and Decision Making. Association for Institutional Research Form Paper.

(12) Coleman, D. R., & Bolte, J. R. 1988. Curricular Impact of College Level Skills Assessments. Association for Institutional Research Forum Paper. 21 p.

(13) Koefoed, J. O. Jr. 1984. An Evaluation of the Use of Major Selection to Predict Program Completion Rates of Career Oriented Liberal Arts Programs at Kirkwood Community College. Ed. D. Practicum, Nova University.

(14) Persistence and Graduation Rates at Germanna Community College, Fall, 1981, through Fall, 1986. 1990. Germanna Community College. 25 p.

(15) Puyear, D. 1990. Persistence and Graduation Rates of Full Time Degree Students Enrolling for the First Time in the Fall Quarter 1981 through the Fall Quarter 1986. Virginia State Dept. of Community Colleges, Richmond. 26 p.

(16) Adelman, C. 1992. The Way We Are: the Community College as American Thermometer. U. S. Department of Education, Office of Research.

(17) Badra, J. "Book Prices Create Concern for Students." The Collegian. Los Angeles City College, March 13, 1992, Vol. CXXVI, No. 3.

Appendix A

MEDS DATA

CODE BOOK

VARIABLES

From Layout 1:

ID Identification
SEX sex
ETH ethnicity
CTZ citizen
DOBY date of birth by year
CLASS (class= # Of units entering with)
COUNTRY country OF CITIZENSHIP
GOAL goal occupational skill, degree
MAJOR major
STS1 status1 (status=transfer, new, continuing)
STS2 status 2
STS3 status3

all variables below this line are done for each of 9 semesters:

CENSUS census day or evening classes, or mixed
MFLG1 matriculation flag 1 to 5, various steps to prepare to
MFLG2 Graduate
MFLG3
MFLG4
MFLG5

UATT this semester (each of 9) units attempted
UCOM this semester (each of 9) units completed
CUATT cumulative units attempted each semester
CUCOM cum. units completed each semester
CGPA cumulative GPA
EFLG ESL flag-needs
FIN1 Fin1 financial aid
GRDC graduation candidate
PRO academic probation
VET a veteran, vet benefits
GFLG gains or afdc recipient
TYPE (types of district dismissal or probation, restrictions)
MSL1 to MSL5 (matriculation service level-care received)
PLAN1 student has an educational plan
PLAN2 when made educ. plan by semester

From Layout 1 starting in Summer '90 and continuing from that semester for each semester:
SMS1 TO SMS7 another count of use of special student services

From Layout 4:
DEG1 degree (AA AS Certificate of Completion)
DEM1 degree major
DEY1 degree year
DED1 month received

CODE BOOK

VARIABLES

From Layout 1:

ID Identification BY SOCIAL SECURITY NUMBER
SEX GENDER
ETH ethnicity

CTZ citizen
US CITIZEN
PERMANENT VISA

DOBY date of birth by year
CLASS (class= # Of units entering with)
COUNTRY country OF CITIZENSHIP
GOAL goal occupational skill, degree
MAJOR major SEE CODE LIST OF MAJORS
STS1 status1=TYPE OF STUDENT (status=transfer, new, continuing)
STS2 status 2=ORIGIN
STS3 status3=SCHOOL PROGRAM

all variables below this line are done for each of 9 semesters:

CENSUS census= day or evening classes, or mixed
MFLG1 ADMISSIONS matriculation flag 1 to 5, various steps
MFLG2 ORIENTATION to prepare to graduate
MFLG3 ASSESSMENT
MFLG4 COUNSELING/ADVISEMENT
MFLG5 FOLLOW-UP

UATT this semester (each of 9) units attempted
UATT189
UATT289
UATT389
UATT190
UATT290
UATT390
UATT191
UATT291
UATT391

Cen189
cen 289
↓
etc.

UCOM this semester (each of 9) units completed
UCOM189
UCOM289
UCOM389
UCOM190
UCOM290
UCOM390
UCOM191
UCOM291
UCOM391

CUATT cumulative units attempted each semester
CUAT189
CUAT289
CUAT389
CUAT190
CUAT290
CUAT390
CUAT191
CUAT291
CUAT391

CUCOM cum. units completed each semester
CUCM189
CUCM289
CUCM389
CUCM190
CUCM290
CUCM390
CUCM191
CUCM291
CUCM391

CGPA cumulative GPA
CGPA189
CGPA289
CGPA389
CGPA190
CGPA290
CGPA390
CGPA191
CGPA291
CGPA391

EFLG ESL flag-needs,TAKING
EFLG189
EFLG289
EFLG389
EFLG190
EFLG290
EFLG390
EFLG191
EFLG291
EFLG391

FIN1 Fin1 RECEIVING financial aid
FIN1189
FIN1289
FIN1389
FIN1190
FIN1290
FIN1390
FIN1191
FIN1291
FIN1391

GRDC graduation candidate

GRDC189
GRDC289
GRDC389
GRDC190
GRDC290
GRDC390
GRDC191
GRDC291
GRDC391

PRO academic probation

PRO189
PRO289
PRO389
PRO190
PRO290
PRO390
PRO191
PRO291
PRO391

VET a veteran, vet benefits

VET189
VET289
VET389
VET190
VET290
VET390
VET191
VET291
VET391

GFLG gains or afdc recipient

GFLG189
GFLG289
GFLG389
GFLG190
GFLG290
GFLG390
GFLG191
GFLG291
GFLG391

TYPE (types of district dismissal or probation, restrictions)

TYPE189
TYPE289
TYPE389
TYPE190
TYPE290
TYPE390
TYPE191
TYPE291
TYPE391

MSL1 to MSL5
(matriculation service level-care received)

MSL1189
MSL1289
MSL1389
MSL1190
MSL1290
MSL1390
MSL1191
MSL1291
MSL1391
MSL2189
MSL2289
MSL2389
MSL2190
MSL2290
MSL2390
MSL2191
MSL2291
MSL2391
MSL3189
MSL3289
MSL3389
MSL3190
MSL3290
MSL3390
MSL3191
MSL3291
MSL3391
MSL4189
MSL4289
MSL4389
MSL4190
MSL4290
MSL4390
MSL4191
MSL4291
MSL4391

PLAN1 student has an educational plan

PLN189
PLN289
PLN389
PLN190
PLN290
PLN390
PLN191
PLN291
PLN391

PLAN2 when made educ. plan by semester

PLW189
PLW289

SMS5291
SMS5391
SMS6189
SMS6289
SMS6389
SMS6190
SMS6290
SMS6390
SMS6191
SMS6291
SMS6391
SMS7189
SMS7289
SMS7389
SMS7190
SMS7290
SMS7390
SMS7191
SMS7291
SMS7391

From Layout 4:

DEG1 degree (AA AS Certificate of Completion)
BLANK = 0
1=AA
2=AS
3=CERTIFICATE OF COMPLETION

DEM1 degree major
SEE MAJOR CODE LIST

DEY1 degree year

DED1 month received

PLW389
PLW190
PLW290
PLW390
PLW191
PLW291
PLW391

From Layout 1 starting in Summer '90 and continuing from that semester for each semester:

SMS1 TO SMS7 another count of use of special student services
SMS1189
SMS1289
SMS1389
SMS1190
SMS1290
SMS1390
SMS1191
SMS1291
SMS1391
SMS2189
SMS2289
SMS2389
SMS2190
SMS2290
SMS2390
SMS2191
SMS2291
SMS2391
SMS3189
SMS3289
SMS3389
SMS3190
SMS3290
SMS3390
SMS3191
SMS3291
SMS3391
SMS4189
SMS4289
SMS4389
SMS4190
SMS4290
SMS4390
SMS4191
SMS4291
SMS4391
SMS5189
SMS5289
SMS5389
SMS5190
SMS5290
SMS5390
SMS5191

Appendix B

ENROLLED IN SPRING, 1992

(WED) 5. 6'92 10:03 NO. 3060233851 P. 2
RESEARCH & DEV.

ENTERING SPRING 1989-CONT. SPRING 1992

90155
523485177
545980826
546617018
546719606
546845238
546871934
547083637
547835899
550639928
552338028
553974352
556692131
566913835
567679033
569838346
570975338
571699695
573417975
573919709
574303845
602077105
610105460
611222522
617039886
618073803
620183535
622016883
624099733

Appendix C

CITIZENSHIP OF SAMPLE

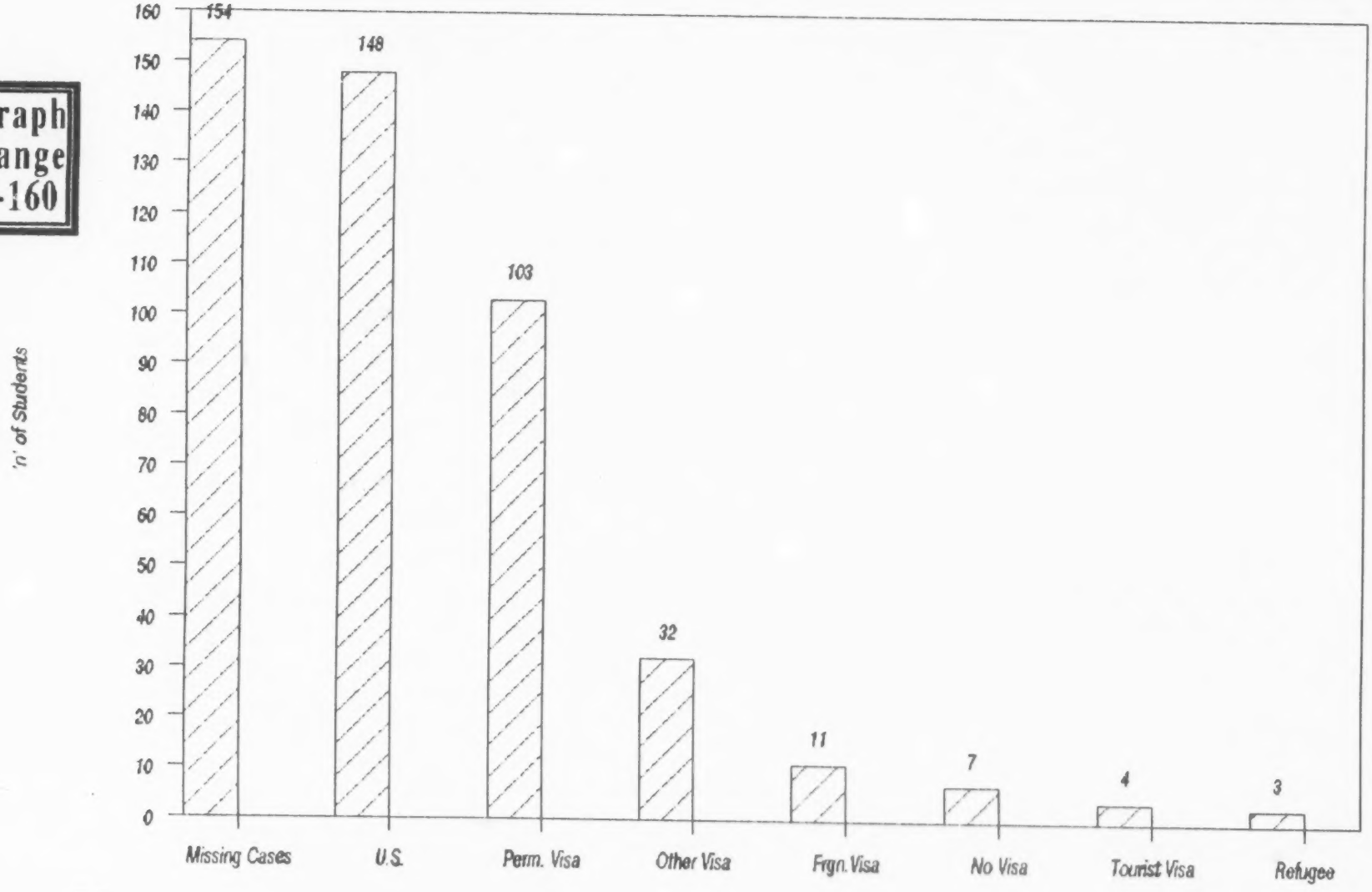
Citizenship of Sample bar

Missing Cases	154	
U.S.	148	
Perm. Visa	103	
Other Visa	32	
Frgn.Visa	11	
No Visa	7	
Tourist Visa	4	
Refugee	3	
	462	sum

Citizenship of Sample

'n' Students of Total 462 Sample

Graph Range 0-160

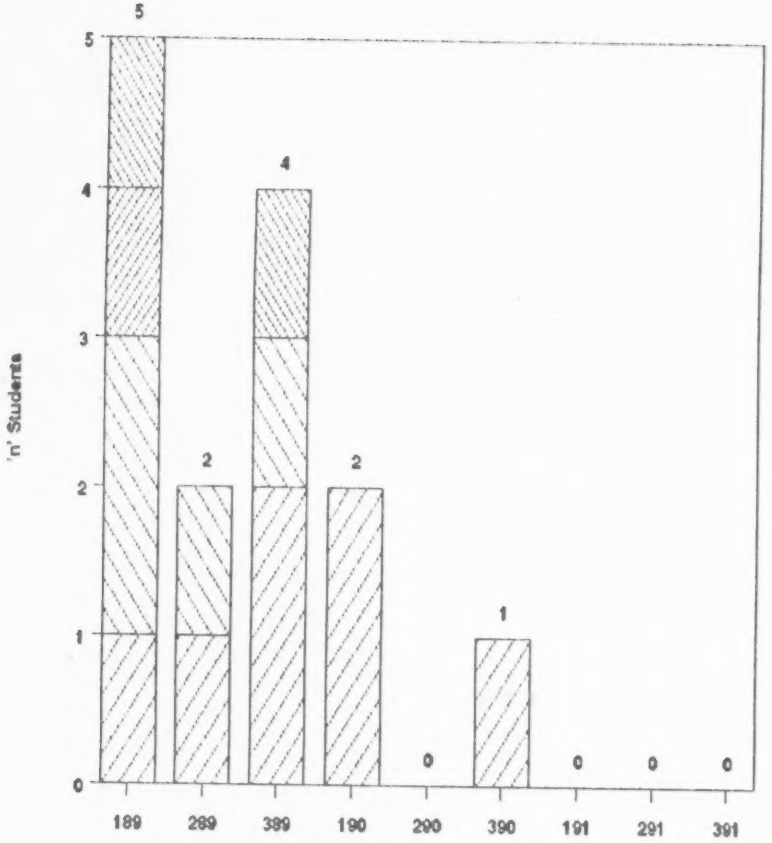


Appendix D

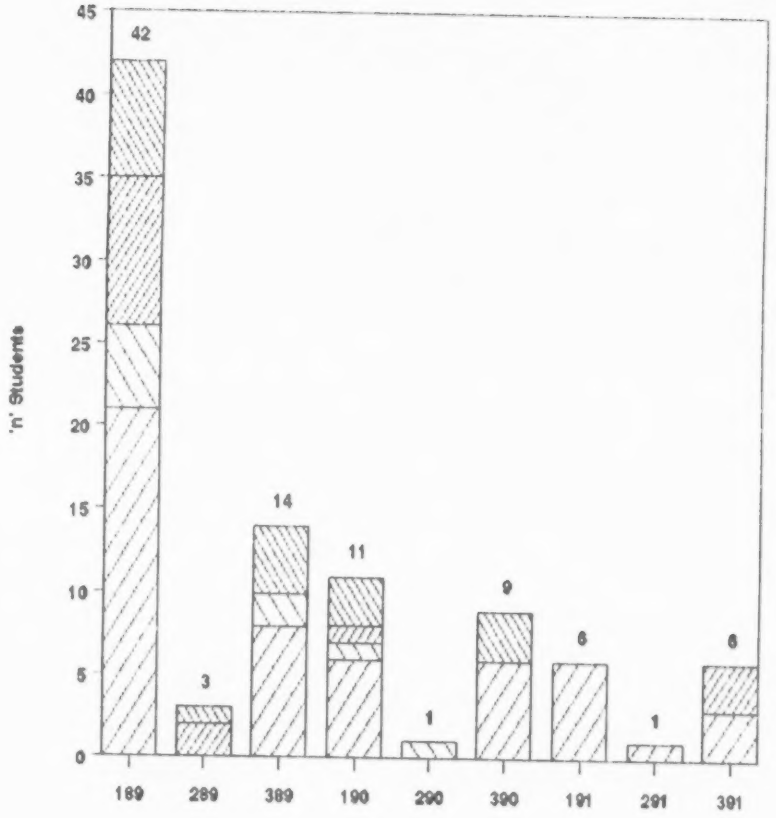
UNITS COMPLETED IN SOME DEPARTMENTS

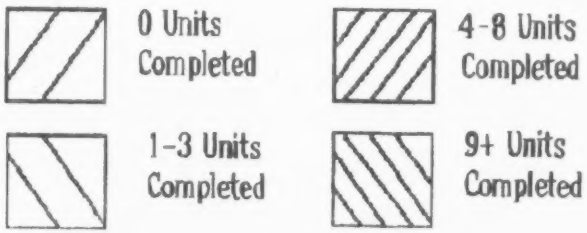
BY NUMBER OF STUDENTS

Art Majors

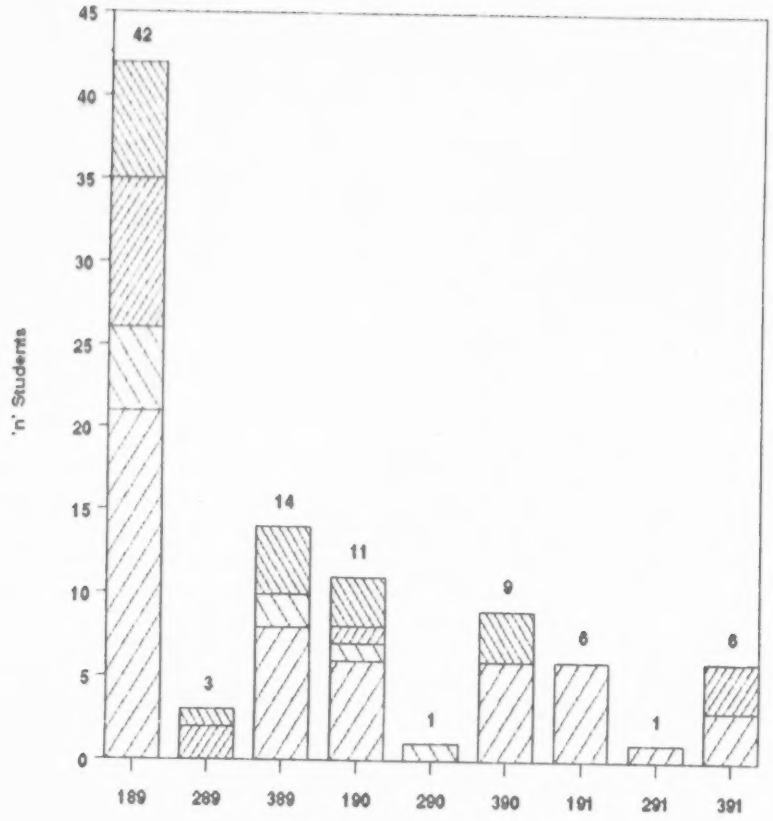


Business Majors

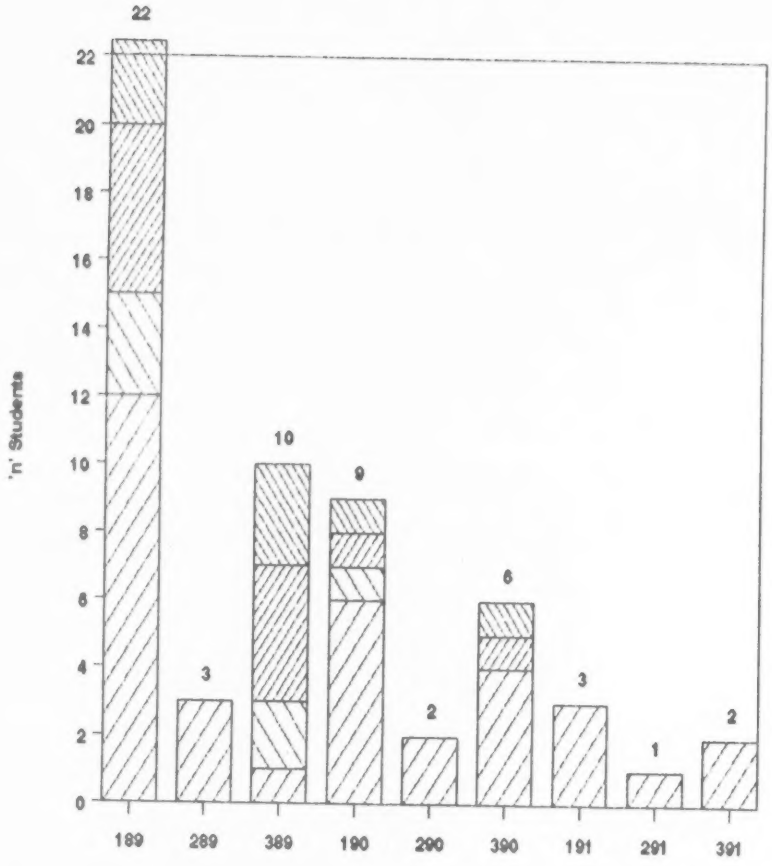


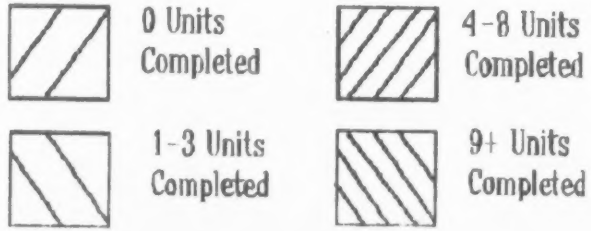


Comp..Tech., Arch., & Eng. Majors

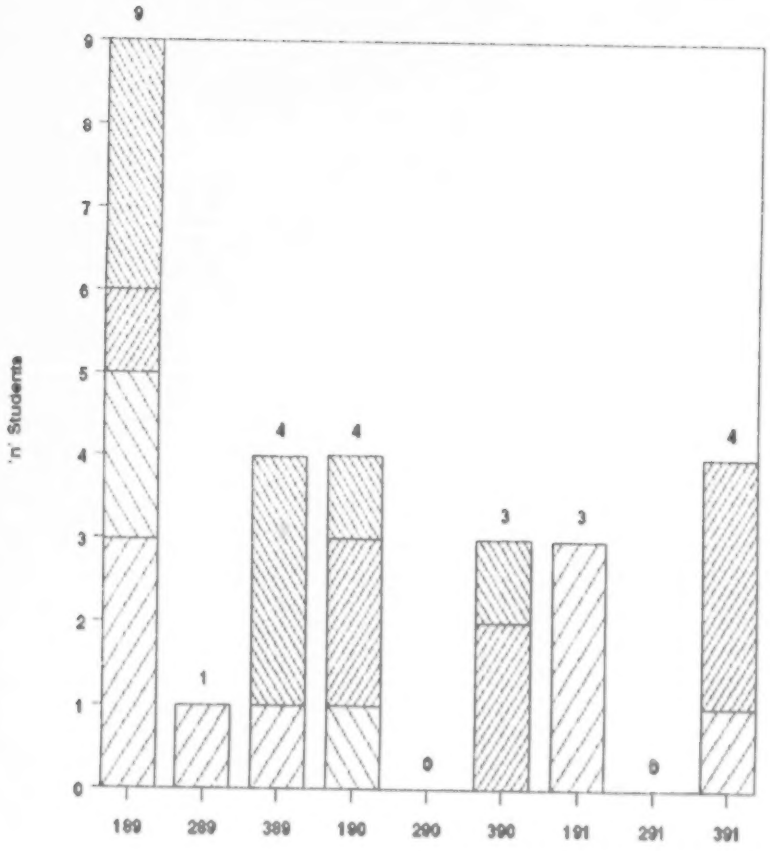


English Majors

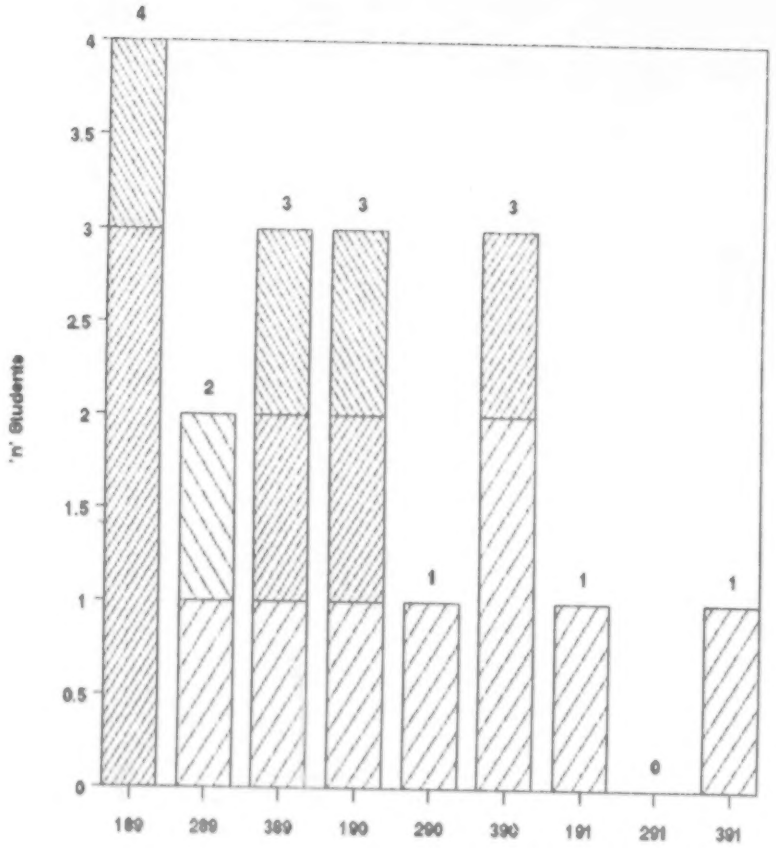


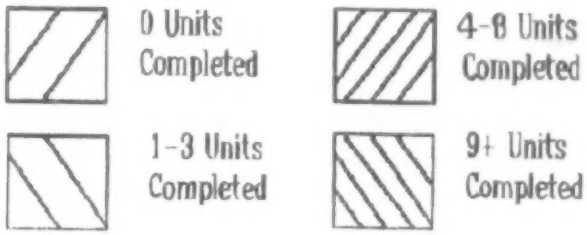


Family and Consumer Majors

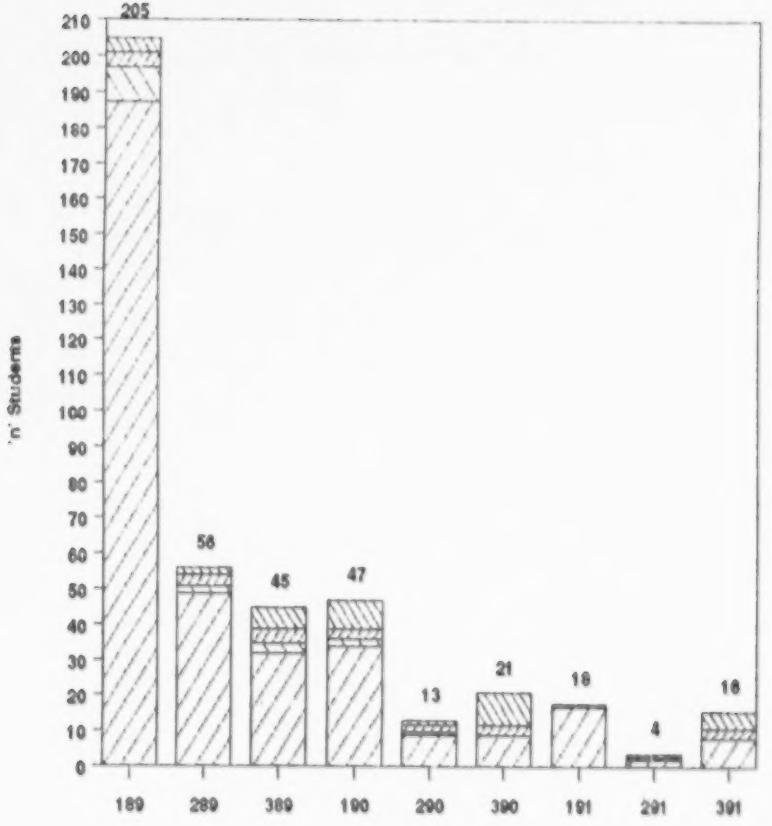


Law Majors

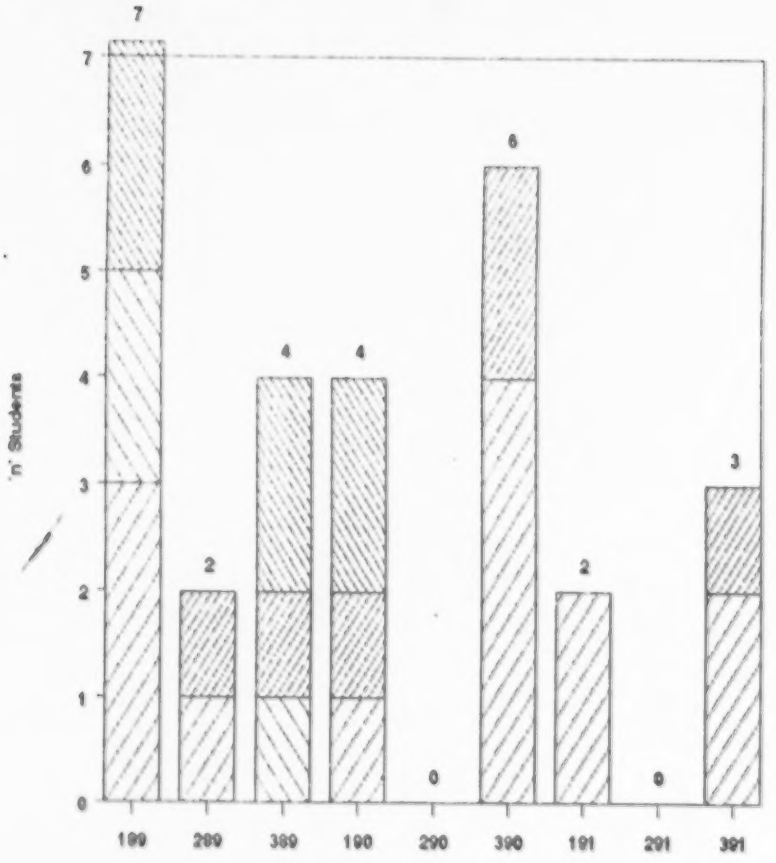




Non Declared Majors



Office Administration Majors



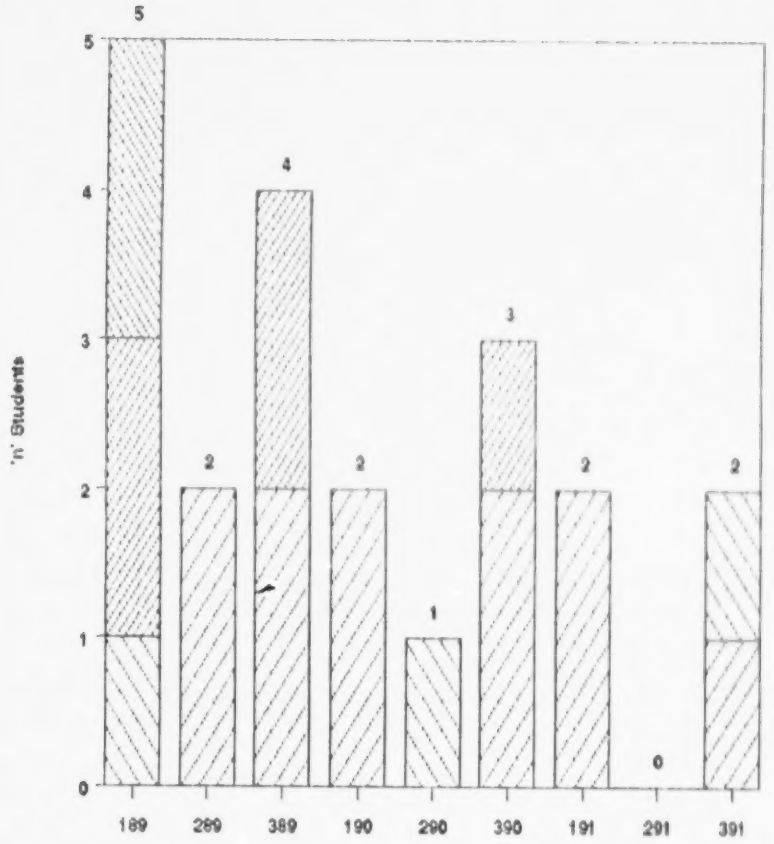
0 Units Completed

1-3 Units Completed

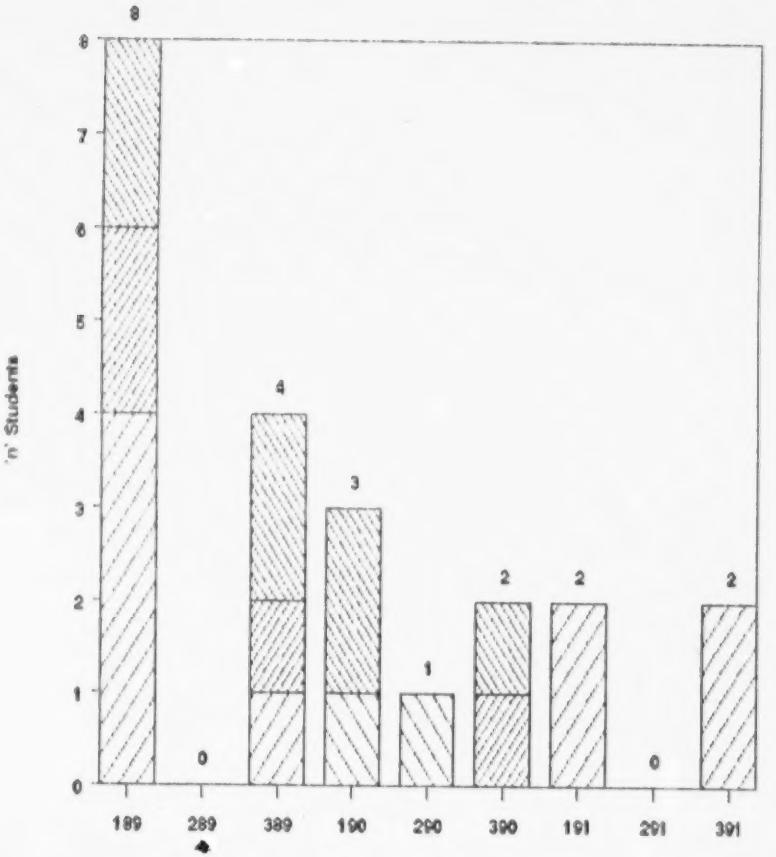
4-8 Units Completed

9+ Units Completed

Psychology Majors



Radio Majors



0 Units Completed

1-3 Units Completed

4-8 Units Completed

9+ Units Completed

APPENDIX E

APPLICATION FOR ADMISSION

LOS ANGELES CITY COLLEGE

APPLICATION FOR ADMISSION

Please type or print clearly all information.

19. Complete this question *only* if you are under 19 *and* have never been married.

Father's address _____ Number/Street/Apt. No _____ City/State _____ Citizenship _____ Country _____ Lived in California since _____ Month/Day/Year

Mother's address _____ Number/Street/Apt. No _____ City/State _____ Citizenship _____ Country _____ Lived in California since _____ Month/Day/Year

Legal Guardian's address _____ Number/Street/Apt. No _____ City/State _____ Citizenship _____ Country _____ Lived in California since _____ Month/Day/Year

20. Ethnic Identity (Please check only one)

10 [ ] Chinese	20 [ ] Black, African-American	50 [ ] Caucasian, White
11 [ ] Japanese	30 [ ] Filipino	60 [ ] American Indian, Alaskan Native
12 [ ] Korean	40 [ ] Mexican, Chicano, Mexican-American	70 [ ] Pacific Islander: Samoan
13 [ ] Laotian		71 [ ] Pacific Islander: Hawaiian
14 [ ] Cambodian	41 [ ] Central American	72 [ ] Pacific Islander: Guamanian
15 [ ] Vietnamese	42 [ ] South American	79 [ ] Other Pacific Islander
16 [ ] Indian Sub-Continent	49 [ ] Other Hispanic	80 [ ] Other Non-white
19 [ ] Other Asian		90 [ ] Decline to state

21. What is your primary language?

1 [ ] English	5 [ ] Filipino	8 [ ] Russian
2 [ ] Armenian	6 [ ] Japanese	9 [ ] Spanish
3 [ ] Chinese	7 [ ] Korean	10 [ ] Vietnamese
4 [ ] Farsi		11 [ ] Other language

22. What is your main educational goal? (Please check only one.)

1 [ ] Prepare for a new career (acquire new job skills)
2 [ ] Advance in current job/career (update job skills)
3 [ ] Discover/develop career interests, plans and goals
4 [ ] Obtain a two-year vocational degree *without transfer*
5 [ ] Obtain a two-year Associate degree *without transfer*
6 [ ] Obtain a vocational certificate *without transfer*
7 [ ] Obtain a Bachelor's degree *after* completing an Associate's degree
8 [ ] Obtain a Bachelor's degree *without* completing an Associate's degree
9 [ ] Maintain certificate or license (e.g., Nursing, Real Estate)
10 [ ] Improve basic skills in English, reading or math
11 [ ] Complete credits for high school diploma or GED
12 [ ] Personal development (intellectual, cultural)
13 [ ] Undecided on goal

23. Special Services (★)

The Los Angeles Community College District is committed to increasing your educational success. Each area listed provides special services. Please indicate those services that would interest you.

1 [ ] Financial Aid	5 [ ] Disabled Student Services (orthopedic, speech, epileptic, vision, diabetic, deaf, hearing impaired, learning disabled)
2 [ ] Child Care	
3 [ ] Tutoring	
4 [ ] Transfer Assistance	6 [ ] Employment Assistance

7 Are you from a low income family and in need of special counseling, tutoring and/or financial aid assistance? [ ] Yes [ ] No

24. Education Status: Check *highest* level you have achieved.

1 [ ] Earned a U.S. High School diploma in 19 ___
2 [ ] Special student currently enrolled in grade 12 or below
3 [ ] Not a High School graduate, currently enrolled in adult school
4 [ ] Not a High School graduate; last attended High School in 19 ___
5 [ ] Passed the GED or received a certificate of H.S. equivalency in 19 ___
6 [ ] Earned California High School Proficiency Certificate in 19 ___
7 [ ] Earned a Foreign Secondary diploma or certificate of graduation in 19 ___
8 [ ] Earned an Associate degree in 19 ___
9 [ ] Earned a Bachelor's or higher degree in 19 ___

25. Enrollment Status

1 [ ] First time college student
2 [ ] First time at L.A. City College, transfer from another college
3 [ ] Returning to L.A. City College after attending another college
4 [ ] Returning to L.A. City College without having attended another college
5 [ ] Enrolling in college while attending school in 12th or lower grade

26. College units or degree completed by first day of this term

1 [ ] 0 Units	4 [ ] 30 to 59½
2 [ ] 1½ to 15½	5 [ ] 60 or more units, no degree
3 [ ] 16 to 29½	6 [ ] AA, AS, BA, BS or higher degree

27. Veteran (leave blank unless you are a veteran)

Were you honorably discharged from the U.S. Armed Forces? [ ] Yes [ ] No

(★) NOTICE TO STUDENTS: Your responses to questions marked with this symbol will be used to provide you with information on college programs and services and/or for research and statistical purposes only. Refusal to provide this information will not be used to deny admission to the college or any of its programs.

★ ★ ★

If additional information is needed to determine your residence status you will be required to complete a supplemental residence questionnaire and/or to present evidence in accordance with Education Code Sections 68040 *et. seq.* The burden of proof to clearly demonstrate both physical presence in California and intent to establish California residence lies with the student.

NON-DISCRIMINATION POLICY:

All programs and activities of the Los Angeles Community College District shall be operated in a manner which is free of discrimination on the basis of race, color, national origin, ancestry, religion, creed, sex, pregnancy, marital status, sexual orientation, age, handicap or veterans status (Reference: Board Rule 1202).

In order to ensure the proper handling of all civil rights matters, each college in the District has its own Affirmative Action Representative, Title IX/Sex Equity Coordinator, Section 504 Coordinator of Handicap Programs, and an Ombudsperson. Direct initial inquiries to the District Office of Affirmative Action Programs and Services at (213) 891-2000.

28. Certification

I declare under penalty of perjury that all information on this form is correct. I understand that falsifying or withholding information required on this form shall constitute grounds for dismissal. Signature _____ Date _____

BEST COPY AVAILABLE

APPENDIX F

MAJOR BY AGE GROUP

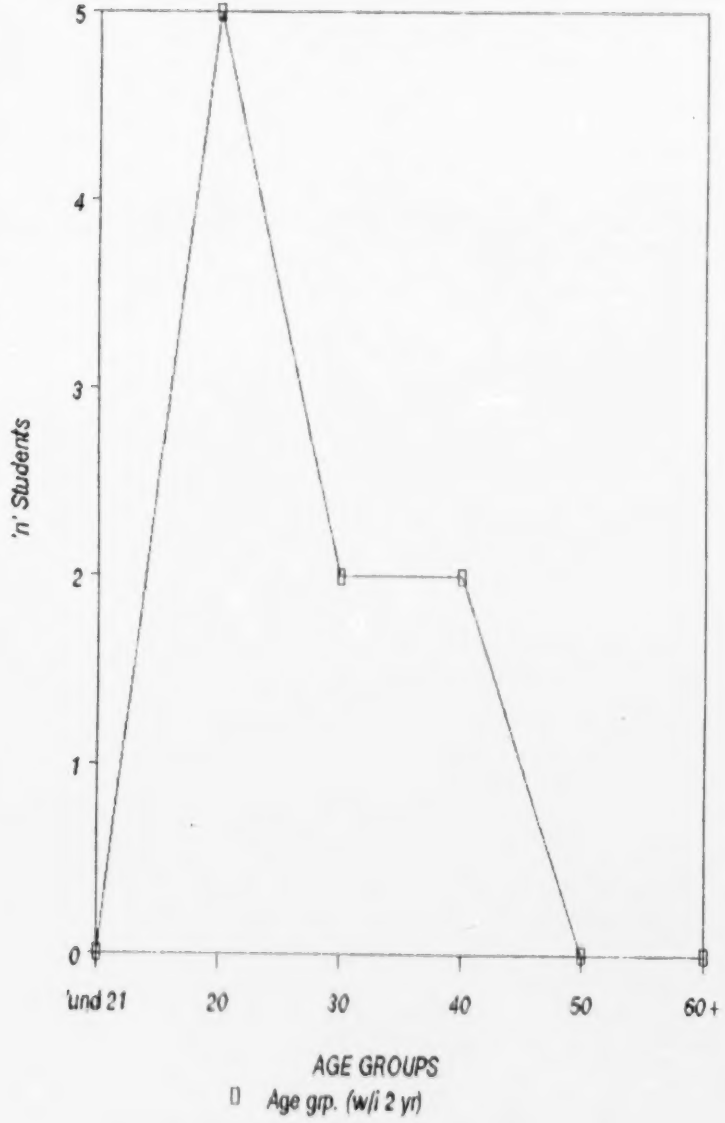
SOME DEPARTMENT DISTRIBUTIONS

BY AGE AND NUMBER OF STUDENTS

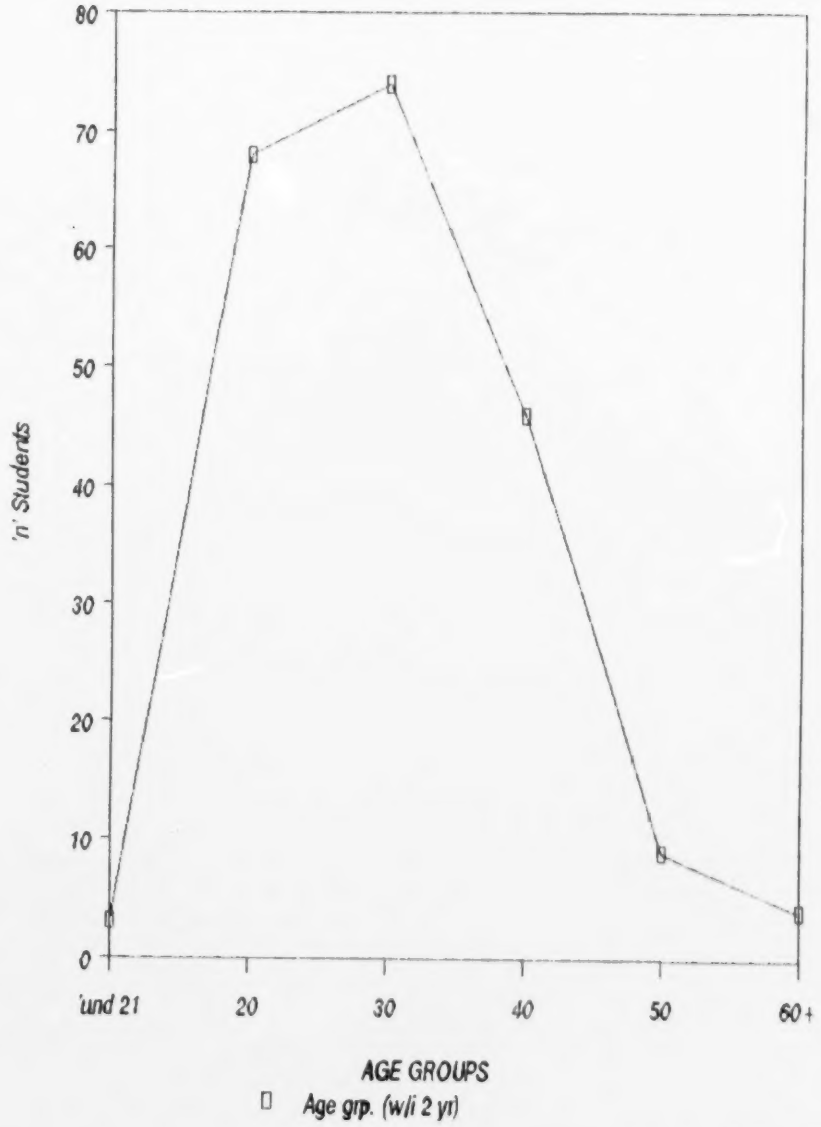
Enrolled in majors by AGE GROUP 1 with no major: line?

	'und 21	20	30	40	50	60+
undeclared	3	68	74	46	9	4
ART		5				
BUSI.	3	26	7	4	2	0
CHEM.		1				
COMP.	0	3	2	2	0	0
ENG.	0	17	3	0	2	0
FAM	0	5	2	2	0	0
F-LANG.	0	1	0	1	0	0
LAW	1	3	0	0	0	0
LF-SCI.		2	1			
MATH				1		
M-ARTS		1	1	1		
MUS	1	3	1		1	
O-ADM.			5	2		
P.E.		1		1		
PHYSICS			1			
PSYCH.	1	3	1			
R-TV-F		4	3	1		
SOC.SCI.		1				
SPEECH			1			
THEATER		1				
TRANS.		1	1			
RAD.		4	3			
grand total	9	150	106	61	14	4

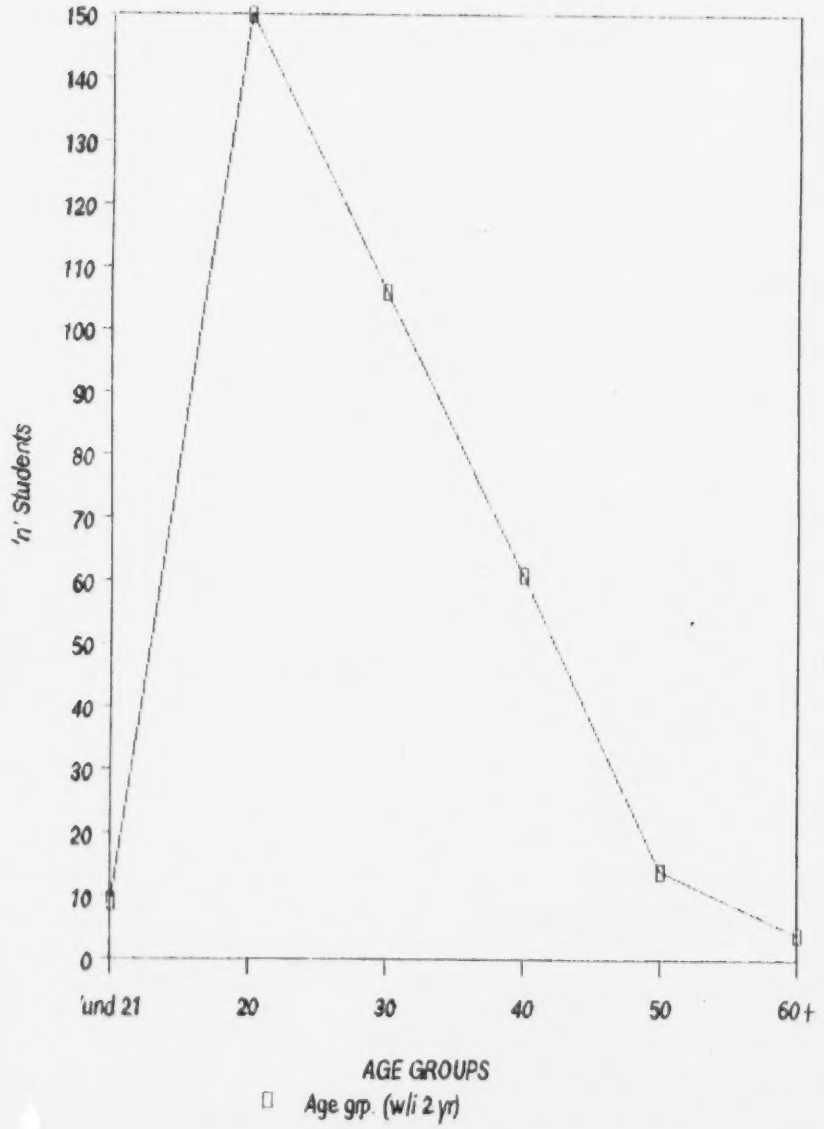
Family and Cons. Majors in Age Group



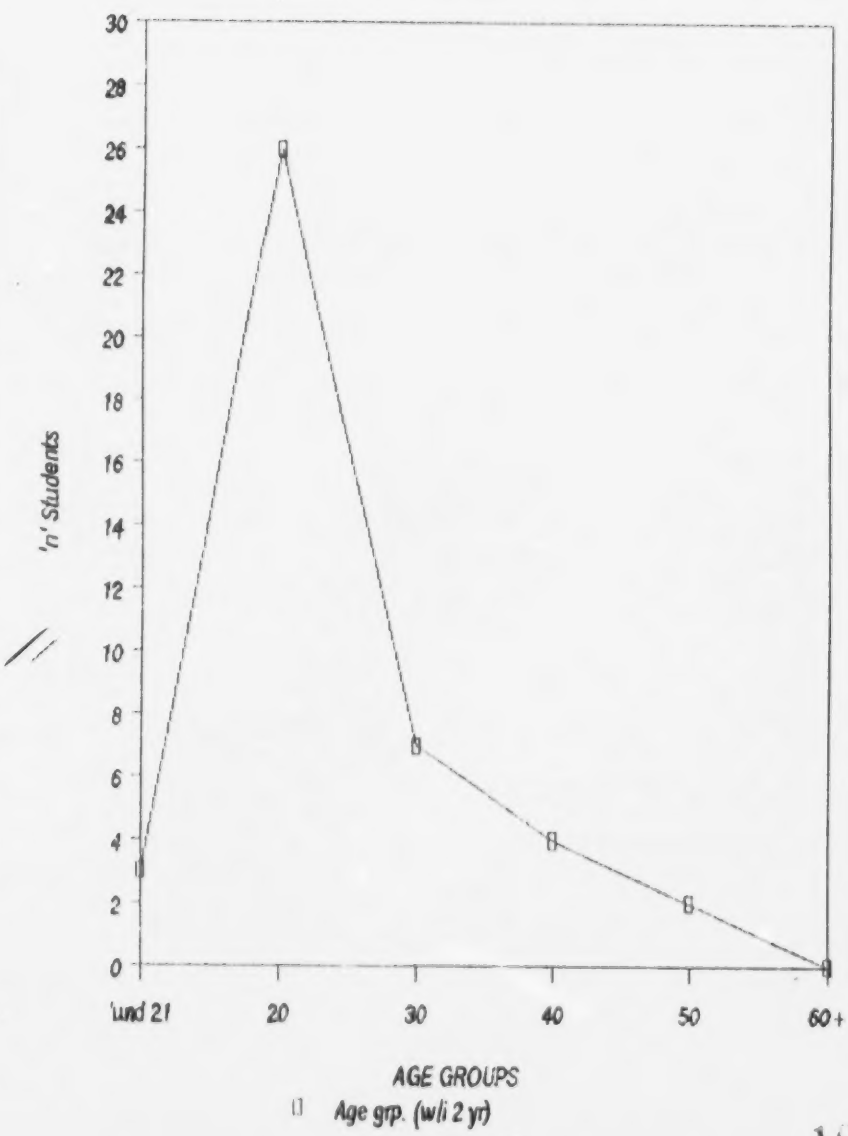
Undecided Majors in Age Group



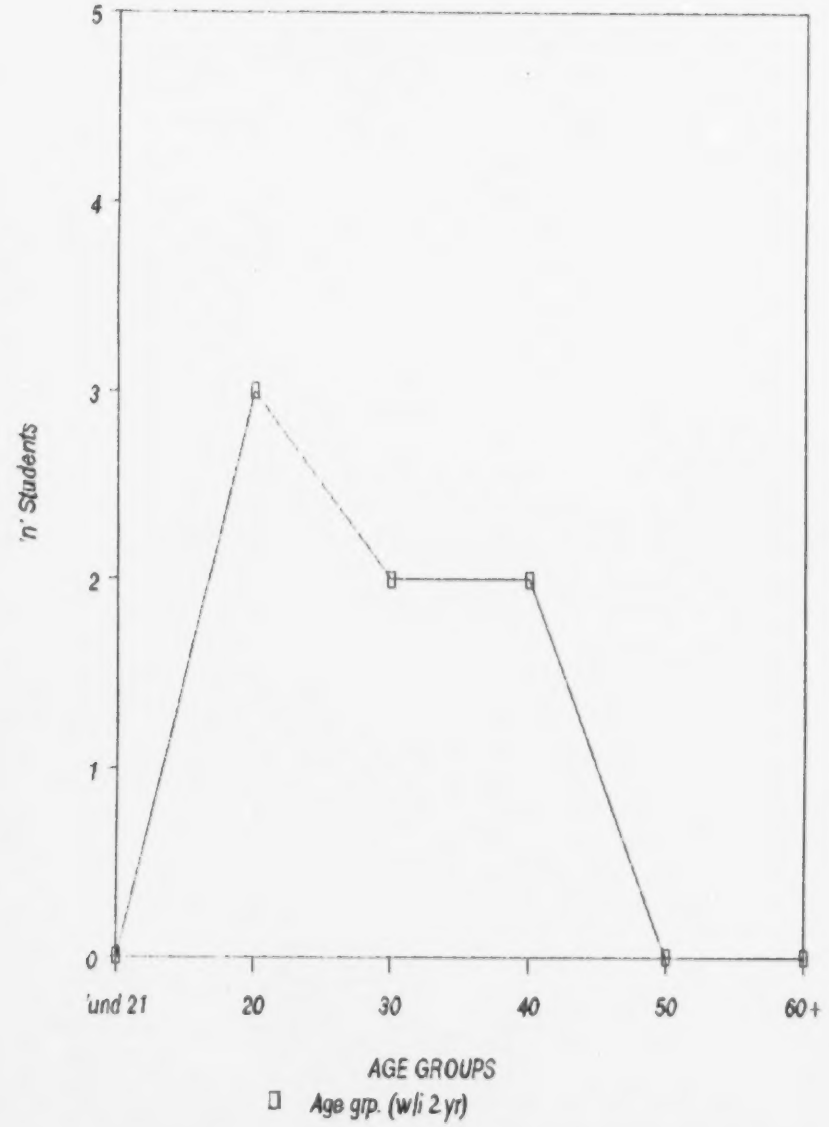
All Declared Majors in Age Group



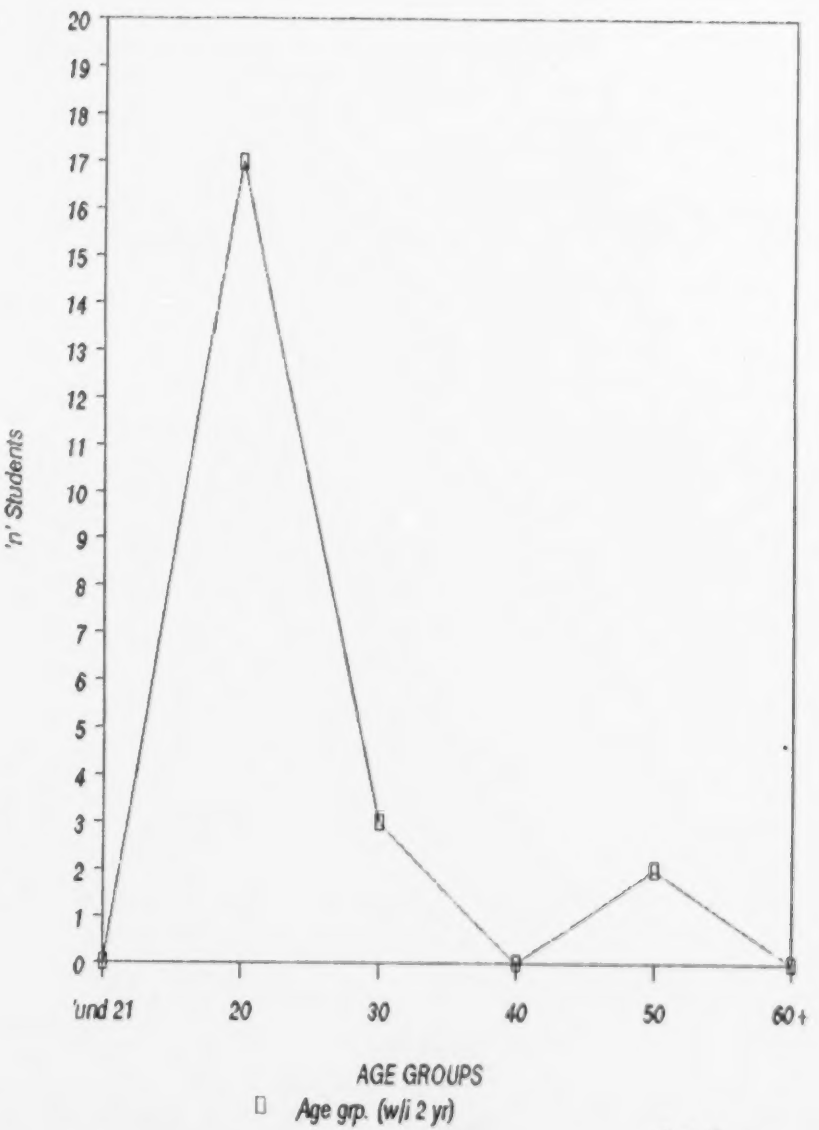
Business Majors in Age Group



Computer Tech. & group Majors in Age Group



English Majors in Age Group



Ethnic Makeup of sample			pie		
				of 462	of 100
American Indian	1		1	0.2%	100.0%
Latino	241		241	52.2%	41.5%
Declined/Other:	28		2	6.1%	357.1%
Caucasian	66		3	14.3%	151.5%
Asian/Pac.Isl.	61		4	13.2%	163.9%
Black	43		5	9.3%	232.6%
Filipino	22		0	4.8%	454.5%
	462	sum			

Gender Mix of Sample			pie
Female	238		
Male	224		
	462	sum	

****

Zero Units taken vs. Probation vs. District Probation
of sample 462

range...x Semester	'N' Students	c Prob	e D.Prob		
189	310	Ø	Ø	Ø	
289	63	5	Ø	Ø	
389	389	13	Ø	Ø	
190	72	26	1	4	to show
290	16	5	Ø	Ø	on graph
390	46	17	Ø	Ø	
191	62	21	Ø	Ø	
291	7	3	Ø	Ø	
391	24	16	Ø	Ø	
average	109.89	11.78			

Goal Upon Entering	line graph
missing	205
undecided	67
AA/4 yr.	60
other	42
O/tech skill	27
cert	20
4/yr.prep	15
AA G.E.	14
AA Voc.	12

****

Cumulative Units Completed — Stacked Bar

range.....x	a	b	c	d	e	f	
Semester-yr	Ø	1-15	16-29	30-45	46-59	60+	'N' ** diff
189	313	138	7	2	Ø	2	462
289	49	22	15	1	Ø	Ø	87
389	48	61	33	6	Ø	Ø	148
190	43	41	30	18	1	Ø	133
290	6	7	10	6	1	Ø	30
390	16	30	19	20	6	1	92
191	10	16	13	16	8	Ø	63
291	2	3	Ø	1	1	2	9
391	8	9	10	12	9	9	57

//

Enrolled per Semester/ units completed — line

	'Ø' comp.	total		difference	
Semester-yr	units	enrolled	percent	incompleted units	
189	301	462	100%	161	
289	64	300	65%	236	'89 tot.
389	71	148	32%	77	474
190	72	133	28.8%	61	
290	16	30	6.5%	14	'90 tot.
390	46	92	19.9%	46	121
191	62	63	13.6%	1	
291	7	9	1.9%	2	'91 tot.
391	24	57	12.3%	33	36

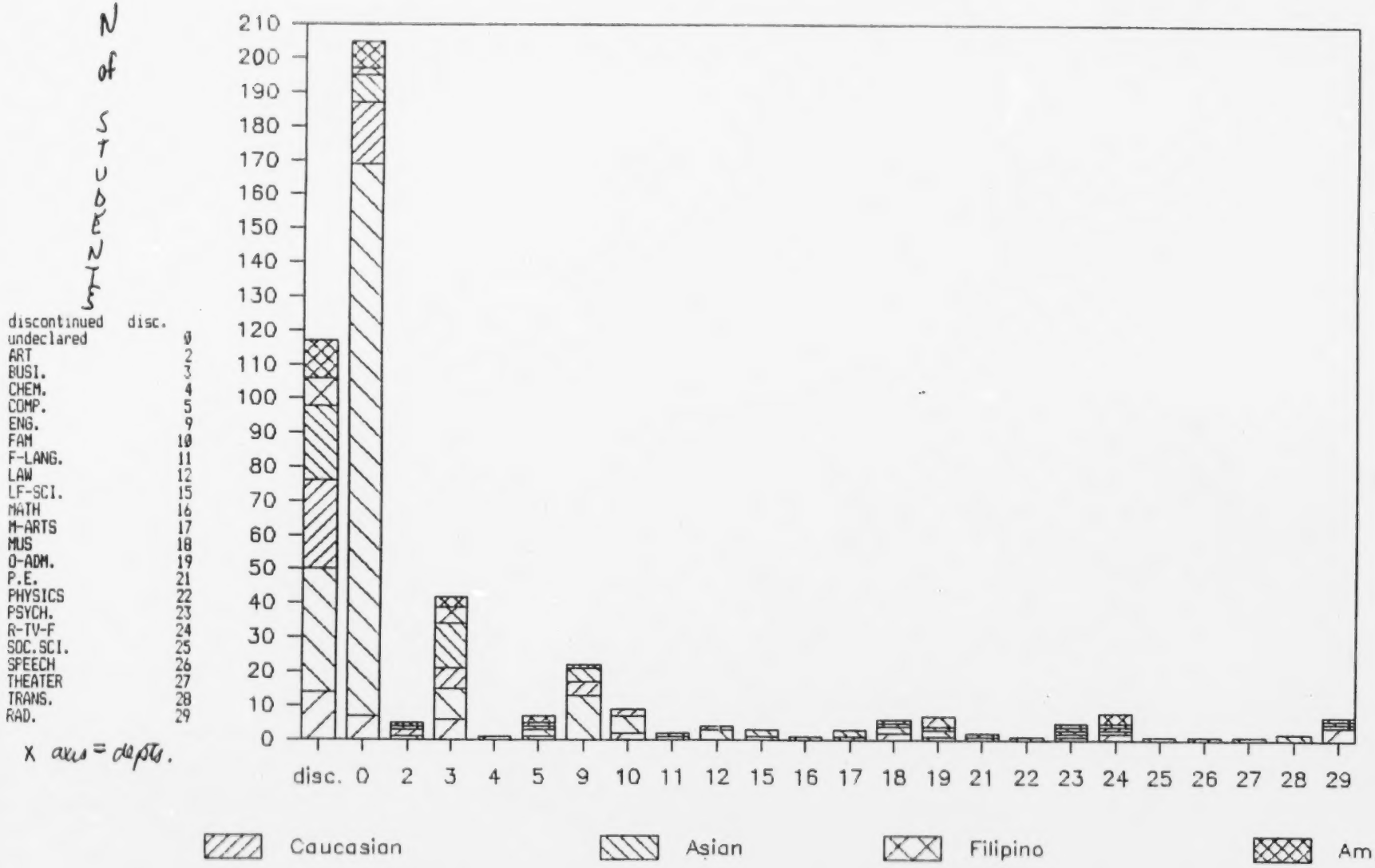
****

Semester Units Completed by SEX; gender OF SAMPLE ONLY

	F	M	
	238	224	started with 462
189	83	69	
289	15	9	
389	45	32	
190	35	26	
290	11	1	
390	29	19	
191	1	Ø	
291	2	Ø	
391	20	13	
	241	169	sum
	-3	55	difference

Mean number of females completing units per semester is 26.778
Mean number of males completing units per semester is 18.778
Z = 3.815 (P < .Ø1)

Majors by Ethnicity



discontinued disc.
undeclared 0
ART 2
BUSI. 3
CHEM. 4
COMP. 5
ENG. 9
FAM 10
F-LANG. 11
LAW 12
LF-SCI. 15
MATH 16
M-ARTS 17
MUS 18
O-ADM. 19
P.E. 21
PHYSICS 22
PSYCH. 23
R-TV-F 24
SOC.SCI. 25
SPEECH 26
THEATER 27
TRANS. 28
RAD. 29

X axis = depts.

1:6

ADDENDUM

In the text the following abbreviations are used:

189 = Spring, 1989 semester
289 = Summer, 1989
389 = Fall, 1989
190 = Spring, 1989
290 = Summer, 1989
390 = Fall, 1989
191 = Spring, 1989
291 = Summer, 1989
391 = Fall, 1989

page 18, last line on page = "qat" = at
page 20 last line on page = "no" = not
page 24 line 5: 169K = 169
page 25 "not orthogonal" = general. Specifically, aggregate data is orthogonal, enrolled number of students by gender over each semester is orthogonal, number of units completed per semester by gender is orthogonal. But, the individual measures, weren't done, because on an individual level it is not orthogonal, as the same individuals were reenrolling over time. We can't say how many units were completed per semester by individuals without another measure.
page 26 paragraph 3 line 9 = "pursuing the degree" = pursuing a goal.
page 26 type of discontinued degree includes "undecided" (not same count as undeclared.
page 27-a Table major by gender first row down = Department code numbers in study.
page 28 paragraph 2 line 12: "no students" = one student
page 31 line 4 = for 1983 and 1984" = for 1983 and 1984 cohort groups.

ERIC Clearinghouse for
Junior Colleges

AUG 21 1992